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ABSTRACT

This study investigated the role of language factors as potential determinants of Hispanics' educational progress. Language background factors included exposure to, use of, and proficiency in both Spanish and English, and the students' perceptions of those factors. They were studied in relation to standardized measures of college aptitude and achievement. Data were drawn from a survey of Hispanic freshmen in 17 four-year colleges. The information gathered related to language background and high school academic experiences, employment and extracurricular activities in high school, educational aspirations, family background, college entrance examination scores, place of birth, language usage, bilingual education, proficiency in English and Spanish, and academic interactions in college. Correlations were made between survey responses and test scores. The principal findings were that: a large number of questions not included in the College Board's Student Descriptive Questionnaire (SDQ) were more highly related to test scores than the existing SDQ question relating to language use; questions probing language preference and self-ratings of English proficiency were the best predictors of verbal test scores; many language survey questions improved prediction of test scores by ten points or more when combined with the existing SDQ question; and the importance of the questions in prediction varied by language group, with survey questions being most important for Puerto Ricans. Appendices contain a general outline of communication skills and the survey instrument and accompanying materials. (MSE)

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College Board
Report
No. 85-3

Language Factors and Hispanic Freshmen's Student Profile

Richard P. Duran
Mary K. Enright
Donald A. Rock

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Language Factors and Hispanic Freshmen's Student Profile

Richard P. Duran
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College Board Report No. 85-3

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College Entrance Examination Board, New York, 1985

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CONTENTS

Abstract 1

Introduction 1
Research Objectives 1
Language Factors and Hispanics' Educational Progress 2
Hispanic Subgroups 2
Language Variation and Language Proficiency 3
Language and High School Achievement 4
Language and Performance on Standardized Tests 5

Methods 6
Selection of Institutions and Students for the Survey 6
Design of the Language Survey Instrument 7
Admissions Test Scores and SDQ Data 7
Conduct of the Survey 7

Results 8
Organization of Discussion 8
Academic and Other Characteristics of Hispanic Freshmen Attending Four-Year Colleges 8
Language Background and High School Academic Experiences 9
Employment and Extracurricular Activities in High School 11
Educational Aspirations 11
Family Background 11
Summary 11
College Entrance Examination Scores 12
Language Background 13
Nativity 13
Language Usage 14
Bilingual Education 17
Proficiency 17
Academic Interactions in College 22
Summary 22
Correlations Between Language Survey Questions and Test Scores 22
Predicting SAT-Verbal Scores from SDQ 38 and Language Survey Question Items 27

Conclusions and Research Suggestions 31

References 32

Appendixes 34
A. General Outline of Communication Skills 34
B. Student Questionnaire 40
C. Additional Enclosures Accompanying Mailed Survey Instrument 58

Tables

1. Language Background and Academic Experience in High School for Hispanic Respondents and for Non-Hispanic White Students at Sampled Colleges 8
2. Employment and Extracurricular Activities in High School for Hispanic Respondents and for Non-Hispanic White Students at Sampled Colleges 9
3. Degree-Level Goals of Hispanic Respondents and Non-Hispanic White Students at Sampled Colleges 10

4. Intended Areas of Study: First Choice of Hispanic Respondents and Non-Hispanic White Students at Sampled Colleges 10
5. Family Background Data for Hispanic Respondents and Non-Hispanic White Students at Sampled Colleges 10
6. Mean SAT and TSWE Scores for Hispanic Respondents and for Non-Hispanic White Students at Sampled Colleges 12
7. Amount of Time Lived in United States for Hispanic Respondents and Their Parents 13
8. Frequency Distribution for Language Usage Reported by Hispanic Respondents 14
9. Mean Extent of Language Usage in Everyday Situations 15
10. Frequency of Various Literacy Activities in English and in Spanish Reported by Respondents 15
11. Percent of Respondents Having Bilingual Educational Experience from Grade School Through College 16
12. Mean Estimate of Amount of Teaching Done in Spanish in U.S. Schools from Grade School Through High School 17
13. Frequency Distribution for Report of Best Language for Schoolwork for Hispanic Respondents .. 18
14. Mean Self-Report of Fluency and Comprehension in English and Spanish for Hispanic Respondents 18
15. Mean Self-Judgments and English Language Proficiency for Academic Skills 19
16. Respondents' Perception of Effect of Language Background on SAT Scores, Grades in School, and Teachers' Judgments 20
17. Influence of Accent on Performance 20
18. Mean Self-Judgment of Participation in Classroom Discussions and Instructors' Responsiveness 21
19. Respondents' Judgments of Influence of Their Ethnicity on Instructors and Other Students 21
20. Correlations Between Selected Language Survey Background Questions, SAT Scores, and TSWE Scores for Hispanic Freshmen 23
21. Language Use Questions 23
22. Correlations Between Self-Ratings of Global Language Proficiency and SAT and TSWE Scores 25
23. Miscellaneous Self-Ratings of English Proficiency 25
24. Self-Ratings of Academic English Skills 26
25. Correlations Between Academic Experience and Questions and SAT and TSWE Scores..... 27
26. Increment in R^2 for Language Background Questions that Contribute Significantly to the Prediction of SAT-Verbal Scores 28

ABSTRACT

This study investigated the role of language factors as potential determinants of Hispanics' educational progress. Hispanic as well as non-Hispanic educators have argued that if we knew more about Hispanics' language background and language skills, we might improve the assessment of their cognitive and academic skills. More specifically, the purpose of this study was to investigate the relationship of language background factors to measures of college aptitude as measured by the Scholastic Aptitude Test (SAT) and other College Board Admissions Testing Program achievement and placement tests. Language background factors that were studied included amount of exposure to both Spanish and English, frequency of use of the two languages, and proficiency in each language.

The students surveyed were freshmen in the fall of 1982 who were attending a sample of four-year institutions that were participating in the College Board's Summary Reporting Service. The data analyzed included test scores, responses to the Student Descriptive Questionnaire (SDQ), and a special questionnaire supplement that included 36 items dealing with language background and language proficiency questions.

The major questions that were addressed by this study were: (1) How did Hispanic freshmen vary with respect to their perceptions of language use and proficiency? (2) What were the relationships between their self-perceptions of their language skills and their test scores? (3) Were there specific language survey questions that would add to the utility of the SDQ in predicting SAT scores?

The principal findings of the study indicated that a large number of non-SDQ language questions were more highly related to SAT and TSWE test performance than was the existing SDQ question 38 (Is English your best language?). Language survey items probing preferences for using Spanish versus English and freshmen's self-ratings of English language proficiency seemed to be the most outstanding predictors of SAT-verbal scores as well as TSWE scores. Many of the language survey questions improved the prediction of the SAT scores by 10 percent or more when used in combination with the SDQ question 38. In addition, the importance of language survey questions as predictors of SAT-verbal scores varied by Spanish language group, with language survey items being most important for Puerto Ricans.

INTRODUCTION

Research Objectives

The role of language factors as determinants of Hispanics' educational progress is not completely understood. It is patently obvious that limited English language proficiency can impede learning in English, but the underlying questions of how language background, language use patterns, and language proficiency are related to Hispanics' educational outcomes are likely to be much more complex. Over the years there has been a persistent suggestion, voiced by many Hispanic educators, that if we knew more about Hispanics' language background and language skills, we might improve assessment of their cognitive and academic skills, and also improve our understanding of factors contributing to Hispanics' successes and failures in the nation's school system.

The purpose of the research described in this paper was to explore the relationship of language background factors, such as amount of exposure to Spanish and English, frequency of use of the two languages, and proficiency in each language, to measures of college aptitude for a sample of Hispanic freshmen entering college. A survey of Hispanic freshmen who had previously taken the Scholastic Aptitude Test (SAT) and other College Board Admissions Testing Program achievement and placement tests was conducted. The students surveyed were freshmen in the fall of 1982 and had attended a sample of four-year institutions participating in the College Board's Summary Reporting Service in the 1982-83 scholastic year. The data analyzed included SAT-verbal and SAT-mathematical subscores, Test of Standard Written English (TSWE) scores, and responses to selected items on the Student Descriptive Questionnaire (SDQ). The latter questionnaire is answered voluntarily by students applying to take College Board Admissions Testing Program tests. In addition to these sources of data, the Hispanic freshmen participants, who represented four subgroups of Hispanics, answered a series of 36 language-background, language-use, and language-proficiency questions administered via a mail questionnaire. In order to compare the characteristics of Hispanic freshmen with white nonminority freshmen at the same institutions, SAT subscores, TSWE scores, and selected SDQ responses were also analyzed for the latter group.

The major objectives of research were to answer the following questions:

1. At the four-year institutions studied, what were the important background and personal characteristics of Hispanic freshmen and how did these characteristics contrast with those of white nonminority freshmen?
2. What were the SAT-verbal, SAT-mathematical, and TSWE score levels of Hispanic freshmen and white nonminority freshmen and how did this information compare across groups?
3. How did Hispanic freshmen vary in their self-judged language background, language use, and language proficiency in Spanish and English?
4. How did Hispanics' answers to language survey questions associate with SAT test scores and TSWE scores?
5. Were there language survey questions that might add

to the utility of the Student Descriptive Questionnaire in predicting SAT-verbal scores?

6. What further research might be needed to assist admissions staff in using information on Hispanics' language characteristics?

Language Factors and Hispanics' Educational Progress

In order to explore how the language characteristics of Hispanics might affect their college access, it is necessary to describe such characteristics in terms of social, environmental, and personal factors and to document how these characteristics are related to high school academic achievement and to performance on standardized tests. At the social and environmental level most Hispanics have a history of exposure to both Spanish and English as everyday languages of communication. For example, data from the Survey of Income and Education (SIE) cited by Brown, Rosen, Hill, and Olivas (1980), indicated that in 1976 only 19 percent of Hispanic college students came from monolingual, English-only backgrounds. Of the remaining 81 percent, only 11 percent who came from backgrounds where both Spanish and English were used reported that they themselves spoke only English.

When describing the language characteristics of Hispanics, it is necessary to take into account two important factors. The first factor involves demographic similarities and differences among Hispanic subgroups and their overall exposure to Spanish and English. The second involves individuals' familiarity with different varieties of English and Spanish that can affect the quality of their educational experiences.

Hispanic Subgroups

The high incidence of exposure to Spanish, the nature of exposure to English, and the educational implications of these and other language characteristics among Hispanics need to be considered in light of demographic similarities and differences among the major Hispanic subgroups: Mexican Americans, Puerto Ricans, and Cuban Americans. Each of these groups has a different history, and each history has had an impact on the social, economic, educational, and linguistic adjustment of the group to life in the United States. The major demographic characteristics of Hispanic subgroups are summarized by Davis, Haab, and Willette (1983), and the educational and linguistic characteristics of the groups are summarized by Duran (1983).

At the cost of oversimplification, some generalizations can be made about the language and educational backgrounds of the various groups. Puerto Rican and Cuban-American groups share, overall, greater exposure to Spanish than Mexican Americans. These two groups are primarily concentrated in the Middle Atlantic states, certain urban areas in the Midwest, and in Florida. Puerto Ricans educated in Puerto Rico have received public school instruction in Spanish, in English as a second language, and also to some extent, content instruction in English. Puerto Ricans schooled in private elementary and private high schools in Puerto Rico may have received most or all of their instruction in English. Puerto Ricans educated in the states have for the most part received schooling only in English, although some may have received instruction in both Spanish and English through participation in bilingual education programs. It is important to note that a great deal of back-and-forth migration between the states and Puerto Rico occurs. Hence, many Puerto Ricans have attended schools in both places and their exposure to English and Spanish may vary considerably.

Cuban Americans' presence in the United States has been marked by three major waves of refugee immigration, coinciding with the Cuban Revolution (1959), the 1965-1973 refugee immigration, and the 1980 refugee immigration (Llanes 1982). Cuban refugees during the early Cuban Revolution period tended to come from middle-class and upper-middle-class backgrounds and on the average they had attended college. The refugees during the 1965 to 1973 period were more likely to have come from working-class backgrounds and their educational attainment level was lower than that of the Cuban Revolution refugees. The most recent group of refugees included persons who reflected lower levels of education and lower socioeconomic status than the earlier groups.

Cuban Americans in the early 1960s initiated much of the contemporary movement toward bilingual education in the United States (Ogletree 1978). Some research has found that Cuban-American second-wave refugees' educational attainment level contributed more to prediction of their occupational aspirations than did self-judgments of their knowledge of English, but similar research on Cubans from other backgrounds has not yet been done (Portes et al. 1978). Laosa (1975) found that Cuban-American children tended to prefer use of English at home more than did their parents, and that in this regard, their language preferences were more similar to a sample of Mexican-American children than to a sample of Puerto Rican children. The latter children preferred to use Spanish at home somewhat more often than the other two groups.

For Mexican Americans, the pattern of exposure to Spanish and English reflects the long-term historical presence of the Spanish language and culture in the Southwest, the proximity of the Southwest to Mexico, and the development of high density Mexican-American communities in certain urban areas of the West and Midwest. There has been a tendency for English language use to increase over Spanish language use with each succeeding generation, particularly among those Mexican Americans whose ancestors migrated to the United States. By the third or fourth generation removed from immigration, ability and preference for Spanish tends to vanish among Mexican Americans, though there may be exceptions to this pattern. Proximity to a Spanish-speaking community and participation in this com-

munity seem to be key factors leading to the maintenance of Spanish (Hernandez-Chavez 1978).

Language Variation and Language Proficiency

Sociolinguists such as Hymes (1983), Gumperz (1971), and Fishman (1971) have pointed out that in studying bilingualism and language variation, it is important to identify how the use of a language and the realization of its structural form are associated with the nature, purpose, and social organization of communicative settings. From this sociolinguisitic perspective, what is termed the *standard variety* of a language is but one variety—the variety most typically associated with the written and spoken language used by persons with formal schooling. Thus, it is necessary to consider how Hispanics' use of Spanish and English varies with the nature of communicative settings, the social and linguistic backgrounds of interactants in settings, the modalities of language use required in settings, and the discourse norms and other conventions of communication judged to be appropriate in the settings.

There has been a fair amount of research on the varieties of Spanish and English spoken by Hispanics in the United States. Ornstein-Galicia (1981) and Penfield (1981), for example, describe three nonstandard forms of English spoken by Southwest Hispanics: Pachuco or Calo; Chicano English; and Black English, along with a fourth variety, Standard American English. Ornstein-Galicia (1981) also mentions that outside of the Southwest there are informal, spoken varieties of Spanish such as Puerto Rican Spanish, Cuban Spanish, Isleño, and Ladino (Judeo-Spanish). Typically, these nonstandard varieties are used in informal social communication and only by some native speakers. Standard Spanish is used for formal oral and written communication and this variety is very similar across all Latin American groups. The nonstandard varieties are distinguishable from each other and from the standard variety mostly by differences in phonology, vocabulary, and idiomatic usage. In some heavily populated Hispanic communities outside of the Southwest, varieties of nonstandard English develop and become socially appropriate for everyday communication among persons from the same background. Nuyorican English, spoken by some Puerto Ricans in New York, is an example of this phenomenon.

The exposure of Hispanics to different varieties of English and Spanish and the effect of this exposure on higher education processes and outcomes has not been investigated extensively. However, some research on monolinguals suggests that ways of thinking and problem solving associated with schooling are related to the varieties of a language familiar to persons. Olson (1977) has suggested, for example, that individuals' development of writing ability appropriate to formal schooling leads to the development of reasoning skills that are also appropriate to schooling. Other researchers (Bernstein 1964) have concluded that socioeconomic class influences the style of speech used at home. Working-class families are alleged to use more informal language, referring in their language primarily to everyday situations and sensory information. In contrast, upper-class families' speech is more likely to refer to events and situations removed from the present, and to information of a more abstract nature.

A view suggesting that the development of cognitive skills is mediated by the superficial surface form of a language to which an individual is exposed may be oversimplified and misleading. Lindholm and Padilla (1981) have challenged a simplistic, deficit model interpretation of Bernstein's theory; they found that Hispanic working-class mothers use language more often than would be expected to teach their children basic cognitive and social skills in the course of everyday communication.

Heath (1982) and Scribner and Cole (1981), in their separate research on literacy in community settings, have found that people learn to read and write in ways that are especially adapted to meet the problem-solving requirements and social circumstances engendered by everyday experiences. They have found that community social and cultural practices and norms for communication determine how people connect use of a language with the thinking activities required in a communicative setting. There are two important points to note here. First, a notation of language proficiency, based only on knowledge of basic phonological, syntactic, and lexical rules of a language is an oversimplification of language ability. Second, elementary skill in using a language in and of itself cannot cause development of higher order reasoning ability although there can be an association and a mutual interdependence. A more adequate notion of proficiency would need to be based on an understanding of how communicative domains and sociocultural practices affect people's ability to learn what is considered to be appropriate thinking and proficient use of a language in a setting. In order to develop language skills appropriate to advanced schooling, persons need to develop an understanding of the nature of the academic activities that require language, and they must develop social and cognitive abilities to participate effectively in academic settings given the cultural and social values that predominate in these settings (Collins 1983; Ogbu 1978).

Although the impact of language characteristics on academic development in Hispanics has not been explicitly studied, some recent research in the area of bilingualism and language proficiency assessment suggests that there are close connections between the demands of schooling and much of the language use occurring in school. Laosa (1984), for example, has found that Chicano and non-Hispanic white children as young as two-and-one-half years of age differ in their cognitive abilities and that these differences are associated with the socioeconomic status and English-Spanish language preferences among the Chicano families.

Cummins (1981) in his research on bilingualism suggests that there are two major dimensions that underlie language proficiency. One dimension concerns skills in language use under cognitively demanding versus less cognitively demanding circumstances. A second dimension addresses

whether skilled language use is more concrete and embedded in an immediate real-world social and cultural context, or instead, more abstracted and more about matters removed from an immediate context. These distinctions appear similar to Bernstein's notions discussed earlier. Language occurring in a school setting is more likely to be cognitively demanding because of the problem-solving requirements of schooling tasks. Also, language in academic settings is likely to involve specialized forms of reasoning requiring careful control of attention and information manipulation, and is more likely to involve topics of communication that are removed from the immediate physical context of communication. Cummin's views, which were derived from his own research and from a synthesis of the bilingualism research literature, suggest that the language proficiency development of bilinguals is affected by the problem-solving tasks and communicative experiences that accompany cognitive development and acquisition of two languages. Further, he has suggested that communicative functioning in cognitively demanding, context-reduced situations is likely to require high-level language manipulation skills and information processing skills that are common across two languages. Oller (1983) has suggested that there is a core language proficiency, regardless of which language is referred to in second language learners, which is closely interlinked with the sorts of mental skills that are assessed on tests of mental abilities and reasoning aptitude.

In recent years the term *communicative competence* has been used in place of *language proficiency* to describe the fuller range of language and discourse skills required in everyday communication. Canale and Swain (1980) have described four major kinds of communicative competence: grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. Canale (1981) summarizes these four kinds of competencies as follows:

> *Grammatical competence:* Mastery of the language code (e.g., lexical items and rules of word formation, sentence formation, literal meaning, pronunciation, and spelling).
>
> *Sociolinguistic competence.* Mastery of appropriate language use in different sociolinguistic contexts, with emphasis on appropriateness of meanings and forms.
>
> *Discourse competence:* Mastery of how to combine meanings and forms to achieve a unified text in different modes (e.g., telephone inquiry, argumentative essay, and recipe) by using (a) cohesion devices to relate utterance forms (e.g., pronouns and transition words), and (b) coherence rules to organize meanings (e.g., repetition progression, consistency, and relevance of ideas).
>
> *Strategic competence:* Mastery of verbal and nonverbal strategies (a) to compensate for breakdowns in communication due to insufficient competence or performance limitations (e.g., strategies such as use of dictionaries, paraphrases, and gestures), and (b) to enhance communication effectiveness.

Appendix A summarizes some important subskills that make up each area of competence. Some of these competencies are assessed by existing language proficiency tests, while others could only be assessed by new types of language proficiency tests yet to be developed. All four areas of communicative competence interact with each other; their value in the context of this report is that they call attention to different skill facets underlying the ability to use language. There is a need to investigate the importance of these skill areas to the development of students' verbal aptitude and success in preparation for college.

Language and High School Achievement

Attention will now turn to some research findings relating language factors to Hispanics' high school achievement. Nielsen and Fernandez (1981) investigated the high school achievement of 6,698 Hispanic high school sophomores and seniors participating in the 1980 High School and Beyond Survey. The survey administered a detailed language questionnaire to non-English-speaking background students. The questionnaire covered respondents' English and non-English background, English and non-English usage patterns, and self-judgments of proficiency in English and the non-English language. Results from regression analyses for Hispanics indicated that self-judgments of proficiency in English and self-judgments of proficiency in Spanish were both statistically significant, positive predictors of high school achievement, even after controlling for the influence of length of United States residence, SES level, gender, and Hispanic subgroup identity. The dependent measures in regression analyses were scores on mathematics, reading, and vocabulary achievement tests, a measure of school progress, and a measure of higher education aspirations.

Interestingly, the analyses showed that the propensity to use Spanish orally (which was measured independent of self-ratings of proficiency in Spanish) was a statistically significant negative predictor of achievement measures. That is to say, students who tended to speak more Spanish at home with their parents were also students who performed more poorly on high school achievement measures.

The finding that self-judgment of proficiency in either Spanish or English positively predicted high school achievement is consistent with Cummin's hypothesis that there may be common verbal ability skills underlying academic language proficiency in two languages; this hypothesis is, of course, not tested directly by the results cited. The finding that more frequent oral use of Spanish at home negatively predicted high school achievement is difficult to interpret. It does not seem reasonable to infer that oral use of Spanish itself caused low school achievement. Other variables related to frequency of oral Spanish use and to high school achievement that were not controlled in the analyses described need to be considered. For example, the effects described might have resulted because more frequent oral use of Spanish at home was allied with more frequent occurrence of accented English in the classroom. Research has

shown that Hispanic students whose English is accented are judged to be less intellectually able and judged to have less desirable personality traits by teachers and other students (Ramirez 1981; Ryan and Carranza 1975).

Language and Performance on Standardized Tests

In this section research on the relationship of language background and performance on standardized tests is reviewed. Data from the College Board shows that Hispanic SAT examinees who indicate that English is not their best language earn lower SAT-verbal scores and lower SAT-mathematical scores than Hispanics who respond that English is their best language (Ramist and Arbeiter 1984). Data from the 1982-83 administrations of the SAT, indicate that 7.4 percent of Mexican-American SAT test takers (Total N = 16,438) and 9.7 percent of Puerto Rican SAT test takers (Total N = 8,089) answered that English was not their best language. These groups of examinees earned median SAT-verbal scores of 290 and 282 respectively. In contrast the median SAT-verbal scores of Mexican Americans and Puerto Ricans who indicated that English was their best language were 374 and 365. Note that the median SAT-verbal score was 428 for all students who indicated that English was their best language.

The median SAT-mathematical scores of Mexican Americans and Puerto Ricans who indicated that English was not their best language were 360 and 337. The median SAT-mathematical scores for those Mexican Americans and Puerto Ricans indicating that English was their best language were 407 and 385. The median SAT-mathematical score for all students indicating that English was their best language was 468.

The pattern of differences in the SAT scores cited clearly indicate a serious test score deficit for those Hispanics who judge that English is not their best language and that this deficit is most apparent for SAT-verbal scores. However, it is also possible that other language factors not represented by responses to the existing College Board SDQ question 38 (Is English your best language?) might associate with and predict SAT scores of Hispanics. This hypothesis is explored in the present project.

Other studies of College Board data have also shown a link between Hispanics' language characteristics and their college admissions and college placement test scores. Alderman (1981) investigated the prediction of SAT test scores from Prueba de Aptitud Académica (PAA) test scores among a group of students taking these tests in Puerto Rico. The PAA test is a Spanish-language college admissions test for use by students applying to Latin American colleges; its sections and score scales are similar to those used on the SAT, although the tests are developed separately (College Board 1981). Alderman found that scores on measures of English-language proficiency moderated prediction of SAT scores from PAA scores. The English proficiency measures used were the Test of English as a Foreign Language (TOEFL), the Test of Standard Written English (TSWE), and the English as a Second Language Achievement Test (ESLAT). The results of the study established that SAT test scores were predicted better from the PAA test score when the students' knowledge of English was taken into account.

Breland and Duran (in press) investigated the English Composition Test (ECT) scores of a group of Mexican Americans and Puerto Ricans responding "yes" or "no" to the SDQ question 38. The ECT test had a written essay portion that was scored holistically, and a multiple choice portion—the latter section focused on students' ability to detect grammatical and other structural and usage errors in writing. The results of the study indicated that the ECT essay writing scores of Hispanics tended to be overpredicted from multiple-choice ECT test scores relative to all students taking the ECT. However, some evidence emerged that Hispanics who scored high on the ECT essay writing task and who judged that English was not their best language had ECT essay test scores that were underpredicted by their multiple choice ECT test scores. The linguistic bases for these results and their implications for college placement have not been investigated. It may be that, overall, Hispanics' essay writing skills lagged further behind in development than those of other students, except among certain Hispanic students who broke this pattern and who developed very strong writing skills. Also, it may be that Hispanics' essay writing scores could have been depressed if essay scorers focused on minor writing infelicities that occurred more often in Hispanics' essays than in other students' essays. These and other hypotheses need empirical research.

Studies of how language factors affect Hispanics' performance on test items occurring on college admissions or other adult-level aptitude tests have not been extensive, and those that have been accomplished have led to some results suggesting that language proficiency might affect performance on items. This hypothesis has not been tested directly, however. Rock and Werts (1979) investigated the hypothesis that SAT-verbal and SAT-mathematical subscores were measuring the same constructs across samples of American Indians, blacks, Mexican Americans, Puerto Ricans, Asians, and whites. Using confirmatory factor analysis techniques, they verified that the SAT-verbal and SAT-mathematical scores were each measuring the same constructs across groups, though the mean level of performance on the two SAT sections differed across groups. Evidence also indicated that the SAT-verbal and SAT-mathematical subscores were equally reliable across groups.

Rock and Werts (1979) also found that the performance of Mexican-American and Puerto Rican students was more like that of white non-Hispanic students on the mathematical section than on the verbal section. Puerto Rican examinees tended to perform more poorly on the verbal section analogy items than was expected based on their performance on other verbal items. Rock and Werts speculated that a lower than native level of English language proficiency among some Hispanic students could induce performance patterns like this.

Ramos (1981) studied the performance of Hispanic examinees on an operator/clerical selection test used by a group of northeastern telephone companies to identify candidates for employment. They found that preference for Spanish-language testing among Hispanics could be allied with lower scores on an English-language employment test. A random sample of Hispanic applicants who indicated that they would have preferred testing in Spanish were given test instructions in Spanish, while the remaining examinees were given test instructions in English. All of the applicants, including the Spanish-preferring examinees in both groups, were then tested in English only. The results showed that modest, but statistically significantly higher employment-battery test scores were obtained by those who had requested test instructions in English. The investigators noted that only 29 percent of the Hispanics to be tested had indicated that they would have preferred Spanish-language testing. Accordingly, they concluded that the results reported would be meaningful only for Hispanics with a strong Spanish background.

Sinnott (1980) studied performance on items occurring on the Graduate Management Admisssions Test (GMAT) as a function of examinees' gender, language background, and ethnicity/foreign origin. The results showed that examinees from a Spanish-speaking background and self-identified Hispanics did not find more than one or two items in each of the three GMAT subtests to be of greater difficulty than for examinees as a whole. However, speakers of Spanish and self-identified Hispanics found more items of high difficulty on the GMAT in comparison to white non-Hispanic examinees who were native to the United States.

Some research on Hispanics' test performance has indicated that performance is more depressed for Hispanics than for white non-Hispanics by imposition of abbreviated timing conditions (Evans 1980). Rincon (1979) found that level of test anxiety influenced a group of Mexican-American high school students' responsiveness to speeded and unspeeded conditions in taking the School and College Ability Tests (SCAT). Hispanics and Anglo-Americans both performed more poorly under speeded conditions, but a moderate level of test anxiety was positively related to an increase in Hispanics' SCAT scores in the unspeeded testing conditions. After a certain point, an increase in test anxiety was always associated with a decline in Hispanics' test performance. This pattern was not the case for Anglo-Americans. Regardless of speededness condition, they performed more poorly on the SCAT as their test anxiety increased. The aforementioned studies were not intended to address issues of the impact of Hispanics' English language proficiency on test and item performance, but they do suggest the possibility that some differences in test performance might be associated with other factors that could interact with language proficiency to affect test performance.

Pennock-Roman (in preparation) presents a wide-ranging review of methodological procedures that could be used to investigate factors that might affect Hispanics' performance on tests and the use of test scores in predicting performance on criterion measures. Further work linking the models put forth by Pennock-Roman to linguistic properties of test items is needed. Linguistic analyses are needed in order to describe specific effects that limited language proficiency might induce on test item performance. Mestre (1981) and Duran (1984), for example, have suggested that it should be possible to detect ways in which knowledge of Spanish language structures might be transferred inappropriately to English in English-language problem solving. However, these latter suggestions drawing on the approaches elaborated by Pennock-Roman have yet to be posed as psychometric models for analyzing test performance. Research in the area of bilingualism and psycholinguistics also suggests that there are some specific ways in which limited language proficiency might affect problem solving (Dornic 1980; Duran 1983; Duran 1984). Bilinguals have been found to perform more slowly while doing problem-solving tasks in their less familiar language. Under some circumstances, bilinguals' ability to represent and manipulate problem-solving information in their less familiar language is less facile and sophisticated. However, evidence has also emerged that bilinguals are likely to try to solve similar problems presented in each of two languages in the same way, despite a difference in their proficiency in the two languages.

The selected review of research in this section is helpful in contexturalizing the research of the present study. It seems clear that while much is known about Hispanics' language background and language proficiency, we are still only beginning to address concretely how language factors might affect Hispanics' preparation for college in light of the information available about students. The goals of the present study have thus been directed toward contributing to missing research that may be of practical value to college admissions staff.

METHODS

Selection of Institutions and Students for the Survey

The Hispanic freshmen participating in this study were sampled from seventeen four-year colleges participating in Round Two of the Summary Reporting Service of the College Board during 1982-83. The institutions were located in the West, Southwest, Northeast, and Southeast of the United States. The institutions selected emphasized a liberal arts curriculum and varied in their undergraduate enrollments from a little over 1,000 students to just under 25,000 students. The average undergraduate enrollment was a little over 10,000 students with an estimated Hispanic undergraduate freshman enrollment that varied from 2 to more than 250 students.

The institutions were not sampled randomly; they were selected with the expectation that it might prove possible to obtain at least 100 respondents in the overall survey representing each of the Hispanic subgroups: Mexican American,

Puerto Rican, Cuban American, and Other Hispanic. SDQ item 37 (How do you describe yourself?) permitted identification of students reporting themselves as "Mexican American or Chicano" and as "Puerto Rican" at the institutions. These students were mailed the language survey instrument to be described later in this section. In addition to this procedure, the list of all students identifying themselves as "Other" in response to SDQ item 37 was inspected, and students who were judged to possess a Hispanic surname were also mailed the language survey instrument. The survey instrument in question asked students to identify themselves as Mexican American or Chicano, Puerto Rican, Cuban American, Other Hispanic, or Other. Responses to this survey question on ethnicity were used in analyzing subgroup data generated in the present study rather than students' original responses to SDQ item 37.

Publicly available directories of students' names and addresses were obtained from the seventeen institutions and the survey instruments were mailed to the students at the addresses given in the directories. In one instance, the administrative staff of a college supervised the mailing of questionnaires to the students. This institution did not permit public access to students' addresses, but it wished to aid the conduct of the research study nonetheless.

To the extent possible, information regarding the conduct of the survey was sent to one or two administrators, staff, or faculty members with special interest in Hispanic higher education access at the institutions. The Hispanic Higher Education Coalition aided in the identification of these individuals. These persons were informed about the study and its purposes, and they were requested to verify this information in the event students at their institutions reported that they had been requested to participate. The contacts at each school were invited to offer feedback to the investigators on the nature of the proposed study, and informative, helpful feedback did get returned to the investigators in a number of instances.

Design of the Language Survey Instrument

The language survey instrument used in the study is given in Appendix B. The instrument was developed to parallel parts of a similar instrument used in the 1980 High School and Beyond survey. The instrument consists of 36 sets of questions. Question sets 1 through 11 request information on students' ethnic subgroup identity, first language, use of Spanish and/or English in various social domains, and exposure to English and Spanish at home. A series of two question sets elicits global self-ratings of proficiency in both languages in all four modalities of language use: oral comprehension, speaking, reading, and writing. Information on parents' nativity and length of residence in the United States is also collected within these two sets.

Question sets 12 through 16 request information on students' exposure to English and non-English instruction, including bilingual education, in grades 1 through 6, 7 through 9, and 10 through 12. Information is also gathered about students' participation in foreign language instruction and participation in English-as-a-second-language instruction. Question sets 17 through 22 address students' use of Spanish or English in conducting several literacy activities in settings out of school.

Question sets 23 through 28 probe various facets of students' English-language proficiency in academic contexts. Finally, questions 29 through 36 focus on students' perceptions of their ability to interact effectively in classrooms.

The analyses discussed in this report do not involve all question items occurring on the language survey questionnaire. Items were excluded that were discovered to have serious anomalies in the interpretation of responses. A number of items were excluded from consideration because their associations with SAT-verbal scores were essentially nonexistent, or because it was inappropriate to interpret the responses to items as numerically extensive variables or as dichotomous variables. Items regarding bilingual education exposure, for example, are not analyzed here because relatively few respondents had been exposed to these programs and because the responses to questions showed very low associations with SAT and TSWE scores.

Admissions Test Scores and SDQ Data

In addition to responses to the survey instrument, the data examined included students' SAT-verbal scores, SAT-mathematical scores, and TSWE scores. Responses to a selected subset of SDQ questions were also examined. Of particular importance were SDQ 38 (Is English your best language?) and SDQ 5 (What is your most recent high school class rank?). Other SDQ questions pertained to students' high school curriculum, extracurricular activities, family background, and educational aspirations.

Conduct of the Survey

A total of 1,048 students were sent the language questionnaire in Appendix B. The letter soliciting students' participation in the survey, along with a letter indicating the support of the Hispanic Higher Education Coalition for the study are in Appendix C. Students were offered a $20 honorarium for completing and mailing back the questionnaire. An honorarium of this magnitude seemed appropriate given the length of the questionnaire and its extensive probing of personal information. The letter of solicitation guaranteed students their anonymity and it also included the consent form that students were required to return with their questionnaires.

A total of 755 students returned their questionnaires and this constituted a response rate of 72 percent. This level of response was considered appropriate to justify the inference that respondent selection bias was not an important factor in interpreting the results of subsequent data analysis. The actual number of cases entering into data analyses varied because a deletion procedure was used to omit cases

Table 1. Language Background and Academic Experience in High School for Hispanic Respondents and for White Non-Hispanic Students at Sampled Colleges

	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*	*White*
Percent reporting English is best language	82.9	97.0	61.6	86.4	85.7	99.1
Median percentile rank in high school	85.9	90.4	83.6	85.8	87.8	89.7
Percent in academic high school program	90.4	87.0	90.5	85.3	88.0	91.8
Median number of honors received	2.5	2.6	2.1	2.10	2.4	2.3
Mean years of study by subject						
English						
M (SD)	4.15 (.404)	4.09 (3.51)	4.09 (.351)	4.07 (.537)	4.10 (.431)	4.09 (.426)
n	114	331	146	117	708	21,972
Mathematics						
M (SD)	4.04 (.680)	3.97 (.664)	3.95 (.630)	4.01 (.650)	3.98 (.657)	4.03 (.657)
n	113	331	146	117	707	21,927
Foreign Language						
M (SD)	2.97 (1.20)	2.78 (1.29)	3.34 (1.19)	3.18 (1.20)	2.99 (1.26)	3.22 (1.33)
n	113	330	145	117	705	21,928
Biological Sciences						
M (SD)	1.55 (.756)	1.69 (1.16)	1.32 (.597)	1.74 (1.02)	1.60 (.991)	1.56 (.976)
n	113	327	145	117	702	21,938
Physical Sciences						
M (SD)	2.61 (1.48)	2.09 (.967)	2.17 (.894)	2.22 (1.04)	2.21 (1.08)	2.38 (1.03)
n	112	328	147	117	704	21,938
Social Studies						
M (SD)	3.25 (.924)	3.26 (.744)	3.35 (.937)	3.15 (.916)	3.26 (.846)	3.29 (.809)
n	113	329	146	116	704	21,906

with missing data on any variables entering into analyses. The number of cases omitted in analyses ranged from about 5 to 10 percent across analyses.

RESULTS

Organization of Discussion

The first section presents a description of the background and personal characteristics of the Hispanic freshmen participating in the survey. The information cited is based on students' answers to a selected subset of SDQ questions. This information is presented in two ways: according to Hispanic subgroup membership and as a combination of all Hispanic subgroups. For purposes of comparison, similar data on white nonminority freshmen from the same institutions is presented. This descriptive overview of students by subgroup, as well as by total group, is important because it aids in interpreting the results of some of the other analyses presented.

The second section presents simple descriptive information on students' SAT and TSWE test scores, while the third section examines patterns in responses to questions on the student language survey instrument. The fourth section presents correlational data describing the association among responses to language survey questions, SAT test scores, and TSWE scores. The subsequent section summarizes the results of regression analyses that sought to examine how much improvement in prediction of SAT-verbal scores would be achieved by adding survey language questions, one at a time, as predictors of SAT-verbal scores, in addition to using existing language question SDQ 38 as a predictor.

Academic and Other Characteristics of Hispanic Freshmen Attending Four-Year Colleges

In this section, the responses of the sample subjects to selected questions on the College Board's Student Descriptive Questionnaire (SDQ) are compared across the Hispanic subgroups surveyed and with responses of white non-Hispanic freshmen attending the same colleges. The questionnaire items that are discussed concern the students' language background and academic preparation, their work experiences and social activities in high school, their educational aspirations, and their family background. In reviewing the following materials it is important to keep in mind that the students surveyed were *successful* college applicants. Thus, they are a select sample of students who took the SAT and

Table 2. Employment and Extracurricular Activities in High School for Hispanic Respondents and for White Non-Hispanic Students at Sampled Colleges

	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*	*White*
Percent working part time in high school	46.4	58.6	54.4	55.1	55.6	64.9
Median number of part-time work hours	17.0	14.8	15.5	14.0	15.2	13.5
Mean number of extra-curricular activities per student	2.82	3.18	2.87	2.92	3.02	3.2
Percent participating in extracurricular activities						
Community or church groups						
None or little	50.9	43.8	39.5	41.0	43.6	38.2
Active	36.0	42.3	38.1	45.3	40.9	40.9
Held office	13.2	13.9	22.4	13.7	15.5	20.9
Athletic activities						
None or intramural	69.0	50.2	63.0	54.2	56.5	44.9
Varsity team	9.7	14.3	10.3	14.4	12.7	13.4
Varsity letter	21.2	35.5	26.7	31.3	30.8	41.7
High school club						
None	6.2	4.8	6.2	11.0	6.4	8.1
Active	38.1	35.6	45.5	38.1	38.5	47.3
Held office	55.8	59.6	48.3	50.8	55.2	44.6
Number responding	112–114	329–331	145–147	117–118	706–709	21,849–21,971

who possessed college preparation credentials that were reviewed favorably by the institutions in question. Therefore, these students can be expected to demonstrate higher academic achievement in high school and higher test scores than the total population of SAT test takers from the same ethnic background.

Language Background and High School Academic Experiences

Information on the language background and high school coursework of the Hispanic students and their white non-Hispanic classmates at the sampled institutions is presented in Table 1. The proportion of Hispanic freshmen reporting English as their best language varies from 61.6 percent for Puerto Rican students to 97 percent for Mexican Americans, while 99.1 percent of the white non-Hispanic students reported English as their best language. The proportion of Puerto Ricans reporting English as their best language is extremely low contrasted with the 90.2 percent of Puerto Ricans who took the SATs in 1981-1982 in the English-speaking United States and who reported English as their best language (Ramist and Arbeiter 1984). The reasons for this difference are not clear, though it should be noted that the College Board 1981-1982 data does not represent test takers who might have taken the SAT in Puerto Rico. Possibly, the institutions sampled in the present study may have attracted a high percentage of Puerto Ricans who migrated to the mainland primarily for educational purposes. It is important to note that the differences in the proportions of English-dominant subjects among Hispanic subgroups is greater than the difference between Hispanics overall and white non-Hispanics. Thus, there is more variability among Hispanic subgroups than between Hispanics and white non-Hispanics.

Despite these differences in language background, the high school academic experience of the Hispanic freshmen and the white non-Hispanic freshmen appear nearly equivalent. As can be seen in Table 1, the Hispanics and white non-Hispanics differ by only 2 percent in median high school rank in class and by 3 percent in proportion of students who had been enrolled in academic high school programs. Furthermore, Hispanic freshmen received as many honors in high school as did their white college classmates. However, among Hispanic subgroups there is a clear relationship between language background and high school achievement. Mexican Americans, who have the highest incidence of English as best language, have the highest median percentile rank in high school while Puerto Ricans, who have the lowest incidence of English as best language, also have the lowest median high school rank.

The similarities in academic experience between Hispanics and white non-Hispanic college freshmen contrast with the differences showing that white non-Hispanics obtain stronger academic preparation in high school, which have been observed in the larger population of all SAT test takers; presumably, the total population of SAT test takers consists of candidates for college, only some of whom will gain college admission. In the College Board data for 1981-

Table 3. Degree-Level Goals of Hispanic Respondents and White Non-Hispanic Students at Sampled Colleges

	Percentage					
	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*	*White*
Two-year program or degree	0.0	0.0	0.0	0.8	0.1	0.3
BA or BS degree	12.3	14.1	14.8	11.0	13.5	21.1
Graduate or professional degree	78.9	74.4	75.3	82.2	77.0	67.8
Undecided	8.8	10.5	9.9	5.9	9.4	10.9
Number responding	114	330	142	118	704	21,895

Table 4. Intended Areas of Study: First Choice of Hispanic Respondents and White Non-Hispanic Students at Sampled Colleges

	Percentage					
	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*	*White*
Arts and Humanities	7.2	4.8	9.0	3.5	6.3	6.0
Biological Sciences and related areas	24.5	29.0	23.4	40.9	30.7	22.9
Business, Commerce, and Communications	11.8	12.1	17.9	13.9	13.3	15.9
Physical Sciences and related areas	22.7	37.3	24.9	27.9	31.3	26.6
Social Sciences and related areas	19.9	13.3	15.8	9.5	14.1	16.6
Undecided and miscellaneous	13.6	3.3	9.0	4.3	4.4	12.1
Number responding	110	330	145	115	702	21,392

Table 5. Family Background Data for Hispanic Respondents and White Non-Hispanic Students at Sampled Colleges

	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*	*White*
Median years of education—Father	13.9	13.5	12.4	13.8	13.5	16.1
Median years of education—Mother	13.2	12.3	12.6	13.0	12.5	14.7
Median parental income	20,999	22,780	15,899	19,833	20,974	37,194
Median number of parental dependents	4.3	5.0	4.8	4.5	4.8	4.4

82 there is a 7 to 12 percent difference in median high school rank and a 10 percent difference in the proportion of students enrolled in academic high school programs between Hispanic and white non-Hispanic test takers (Ramist and Arbeiter 1984). However, among students admitted to the colleges in our sample, Hispanic students were equal to their white non-Hispanic classmates in terms of their high school rank and course preparation for college. Thus, as expected, the Hispanic students in this sample are a very select population.

Employment and Extracurricular Activities in High School

Table 2 compares Hispanic and white non-Hispanic freshmen on answers to survey questions about employment and extracurricular activities in high school. About 9 percent more of the white non-Hispanics worked part time while they were in high school. Among students who worked, the number of hours per week was highest for Cuban Americans and equivalent across the remaining Hispanic groups and the white non-Hispanics.

During high school, Hispanic students participated in nearly as many extracurricular activities as white non-Hispanic students but the pattern of participation in different types of activities varied between Hispanics and white non-Hispanics, particularly with respect to leadership positions. When compared with white non-Hispanics, 5 percent fewer Hispanics held office in community or church groups and 11 percent fewer won varsity letters in athletics. However, 10 percent more Hispanics held office in high school clubs. This pattern of participation was consistent across Hispanic subgroups with one exception. Puerto Rican students demonstrated a high rate of participation and leadership in community and church groups as well as high school clubs. In summary, this data indicates that the Hispanic freshmen attending the colleges in this sample had participated in extracurricular activities and demonstrated leadership capabililities at a rate nearly equal to that of their white non-Hispanic classmates.

Educational Aspirations

The degree-level goals of the Hispanic respondents and of the white non-Hispanic students in this sample are described in Table 3. The students in all the Hispanic subgroups had higher degree-level goals than did the white non-Hispanic students. When compared with the white non-Hispanics, about 8 percent fewer Hispanics planned to attain only a bachelor's degree while 9 percent more planned to go on to graduate or professional school. Among the Hispanic subgroups, Mexican Americans and Puerto Ricans showed relatively lower aspirations than did Cuban Americans and Other Hispanics. It should be noted that the difference in aspirations between Hispanics and white non-Hispanics is larger than those found in the total population of 1981-82 SAT test takers (Ramist and Arbeiter 1984) where 46.5 percent of the Mexican Americans, 43.9 percent of the Puerto Ricans, and 41.8 percent of the white non-Hispanics planned on additional graduate or professional training.

Table 4 presents the intended areas of study for these students. Overall, Hispanics indicated a stronger interest in the biological and physical sciences than did white non-Hispanics. This is interesting because no difference in intended area of study was noted between Hispanics and white non-Hispanics who took the SATs in 1980-81 (Duran 1983). Furthermore, previous research indicated that fewer Hispanics in college enrolled in areas of study related to high levels of professional aspiration, such as the biological and physical sciences and business (Brown, Rosen, Hill, and Olivas 1980).

Patterns of intended areas of study vary among Hispanic subgroups. The Cuban Americans were very similar to the white non-Hispanics in their plans. Although about 50 percent intend to major in the biological or physical sciences, large proportions were interested in the social sciences or undecided about their majors. In contrast with the Cuban Americans and the white non-Hispanics, nearly 70 percent of the Other Hispanics group planned to major in the biological and physical sciences.

Family Background

Data on parental education and income are presented in Table 5. The parents of the white non-Hispanic students in the sample are better educated and more likely to have had some college education than are the Hispanic parents. While the parents of the Hispanic students had less education than the white non-Hispanic parents, most of them had completed high school. Therefore, they represent a relatively well-educated segment of the overall Hispanic population, roughly half of whom may fail to complete high school (Brown et al. 1980). Among the Hispanic subgroups, Cuban-American parents had the highest educational level and Puerto Rican parents the lowest.

The $17,000 difference in median income between Hispanics and white non-Hispanics in this sample is quite large and more than twice the $7,000 difference between Hispanics and white non-Hispanics existing in the U.S. population at large in 1981 (Davis, Haub, and Willette 1983). Furthermore, Hispanic families also had slightly more dependents than white non-Hispanics (4.8 vs. 4.4). The large difference in income in our sample reflects the fact that the white families included had much higher incomes than whites in the population at large. Davis et al. (1983) reported a median family income of $23,517 for white families in 1981 as compared with the $37,194 found in this sample. The median income of $20,974 for Hispanic families in the sample was only somewhat higher than the $16,401 for all Hispanic (Davis et al. 1983). Across Hispanic subgroups, income was highest for Mexican Americans and lowest for Puerto Ricans.

Summary

In this section we presented a description of the background characteristics of Hispanics and white non-Hispanic freshmen at the sample colleges based on the students' responses to

Table 6. Mean SAT and TSWE Scores for Hispanic Respondents and for White Non-Hispanic Students at Sampled Colleges

Test	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*	*White*
SAT-verbal						
Total						
M	466	468	430	461	458	521
SD	98.6	91.3	110.9	104.3	99.9	95.0
Vocabulary						
M	456	459	424	454	450	515
SD	102.2	92.5	107.2	108.7	101.0	95.8
Reading						
M	472	473	438	466	464	519
SD	99.6	95.0	116.9	103.8	102.8	98.9
SAT-mathematical						
M	497	520	472	505	504	575
SD	104.5	101.5	113.2	100.9	105.8	98.5
TSWE						
M	45.9	46.7	41.7	45.2	45.3	50.6
SD	8.51	8.21	103.5	8.79	9.02	7.50
Number responding	113	327	147	117	704	21,786-21,797

the Student Descriptive Questionnaire. The discussion focused on the students' language background and academic experiences prior to college, their work experiences and social activities in high school, their educational plans, and their family background. These variables were compared across Hispanic subgroups and between Hispanics and white non-Hispanics.

A number of differences among Hispanic subgroups were noted. The strongest contrasts occurred between Puerto Ricans and Mexican Americans. Mexican Americans had the highest frequency of students who reported that English was their best language, the highest median rank in class, and the highest family income. Puerto Ricans had fewer students who reported that English was their best language, the lowest median high school rank, and the lowest income. However, it is important to note that the academic credentials and leadership abilities of the Puerto Ricans were quite high when compared with total population of SAT test takers in 1981-82. The students who were grouped as Other Hispanics had the highest educational aspirations and the strongest interest in the biological and physical sciences, while Cuban Americans were most similar to white non-Hispanics in terms of their areas of interest.

When contrasted with white non-Hispanics, 13 percent more Hispanics reported that English was not their best language. Despite this difference in language background, the Hispanic students had academic credentials from high school that were nearly equivalent to those of the white non-Hispanics and they demonstrated leadership capabilities at a rate nearly equal to that of white non-Hispanics. Furthermore, the Hispanic students had comparatively high educational aspirations. However, large differences in family income were found between Hispanics and white non-Hispanics.

These data have a number of implications. To the extent that high school academic coursetaking patterns, high school achievement, and leadership experience are measures of college potential and that educational aspiration is a measure of motivation, the Hispanic students admitted to the sample colleges are the equals of their white non-Hispanic classmates. However, if adequate financial aid is not available, the relatively low family incomes of Hispanic students may deter them from completing college. Previous research found that Hispanics cited financial difficulties more often than did white non-Hispanics as a major reason underlying their need to drop out of college (Brown et al. 1980). Furthermore, when compared with white non-Hispanics, financial concerns have a much stronger role in determining whether or not Hispanic parents send their children to college and the type of college they select (So 1984).

College Entrance Examination Scores

This section discusses Hispanic freshmen scores on the Scholastic Aptitude Test (SAT) and the Test of Standard Written English (TSWE). The mean scores and standard deviation of measures on these tests for the Hispanic students who participated in the present survey and for their white non-Hispanic classmates are presented in Table 6. The SAT-verbal and SAT-mathematical tests are scored on a scale of 200 to 800. The range of score differences between Hispanic subgroups and white non-Hispanic students admitted to our sample colleges was 53 to 91 points on the SAT-verbal measure and 50 to 103 points on the SAT-mathematical

Table 7. Amount of Time Lived in United States for Hispanic Respondents and Their Parents

Family Member	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
Father					
Percent born in U.S.	0.9	71.0	26.7	28.2	43.7
Median years in U.S. if born elsewhere	18.5	23.2	20.9	16.5	19.5
Mother					
Percent born in U.S.	1.8	68.0	26.5	27.4	42.3
Median years in U.S. if born elsewhere	18.5	21.9	20.5	15.8	19.0
Respondent					
Percent born in U.S.	47.4	92.0	72.3	52.1	74.3
Median years in U.S. if born elsewhere	14.5	13.8	3.8	12.4	12.5
Number responding	113–114	334–339	146–148	117–119	710–720

measure. These differences are equal to one-half to one standard deviation. On TSWE, scored on a scale of 20 to 60, the difference between these groups was from 6.2 to 8.4 points. When the Hispanic subgroups are compared with each other, Cuban Americans, Mexican Americans, and Other Hispanics perform very similarly on the SAT-verbal and TSWE measures, while Puerto Ricans earn lower scores. Mexican Americans have the highest SAT-mathematical scores and Puerto Ricans have the lowest.

Similar score differences between white non-Hispanics and Hispanics have been found in the larger population of all 1981-82 SAT test takers (Ramist and Arbeiter 1984). When compared with white non-Hispanics, Puerto Ricans and Mexican Americans scored 67 to 77 points lower on the SAT-verbal subtest, 43 to 61 points lower on the SAT-mathematical subtest, and 5.9 to 8.4 points lower on the TSWE.

It is important to note that the score differences that favored white non-Hispanics in the overall population of test takers are maintained among students admitted to colleges even though the Hispanic students are a very select group whose academic credentials, leadership capabilities, and motivation are equal to those of their white non-Hispanic classmates as documented in the previous section of this report. One implication of this finding is that colleges appear to be taking into consideration multiple indices of academic abilities and, overall, not requiring that Hispanics display the same levels of SAT scores in the admissions process as might be required of nonminority students.

Duran (1983) has discussed a number of factors affecting development and display of academic ability that might affect Hispanics' test scores and their utility in admissions decision making. These factors include language background, the lower socioeconomic and educational achievement of Hispanic families, limits on Hispanics' opportunity to profit from classroom instruction, and test-taking conditions and test-taking strategies. As noted in the previous section, the Hispanic students in this sample differed from their white non-Hispanic classmates in language background and socioeconomic status. The language background of the Hispanic students will be described in more detail in the next section and the relationship of language background to test scores will be considered in the following section.

Language Background

In this section the responses of the Hispanic freshmen on the language survey instrument are described and summarized. This questionnaire provides a fairly detailed exploration of various aspects of language background. These aspects include:

1. the nativity of the respondents and their parents
2. their language usage patterns at home, at school, and in the community
3. the extent of exposure to bilingual education
4. self-judgments of proficiency in English and in Spanish and perceived effects of language background on test scores, grades, and instructors' judgments
5. academic experiences and interactions.

Nativity

One factor that is likely to have a strong influence on the language usage patterns and the degree to which individuals have become assimilated to the majority culture is length of contact with that culture. Data on geopolitical nativity and the length of time lived in the United States for survey respondents and their parents are presented in Table 7. Overall about 74 percent of these students were born in the United States but only 42 to 43 percent of their parents were. In view of the fact that Hispanic subgroups differ in their immigration history, differences in length of time spent in the United States were expected. In agreement with these patterns of immigration, the proportion of Mexican-American students (92 percent) and their parents (68-71 percent)

Table 8. Frequency Distribution for Language Usage Reported by Hispanic Respondents

Language	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
First spoken					
English	4.4	59.6	21.3	37.0	39.2
Spanish	79.8	26.1	59.3	53.8	46.1
Both	15.8	14.2	19.3	8.4	14.6
Other	0.0	0.0	0.0	0.8	0.1
Family uses at home					
English	0.0	46.7	13.3	29.4	29.7
Spanish	21.1	19.8	54.7	47.1	40.7
Both	78.1	33.1	32.0	21.8	29.1
Other	0.9	0.3	0.0	1.7	0.4
Used with high school friends					
English	42.1	81.3	51.7	74.8	61.8
Spanish	0.9	2.4	25.2	4.2	7.2
Both	56.1	16.3	23.2	21.0	24.8
Other	0.9	0.0	0.0	0.0	0.1
Used with college friends					
English	57.0	35.5	55.6	73.1	72.8
Spanish	0.0	0.6	2.6	1.7	1.1
Both	43.0	13.6	41.7	25.2	26.0
Other	0.0	0.3	0.0	0.0	0.1
Number responding	114	337–338	148–151	117–119	715–723

who were born in the United States was very high, while that for Cuban-American students (47 percent) and their parents (1-2 percent) was very low. Slightly more than one-quarter of the Puerto Ricans and Other Hispanic parents, 72 percent of the Puerto Rican respondents, and 52 percent of the Other Hispanic respondents, were born in the United States. The data for Puerto Ricans on nativity may be anomalous to interpret, since the Puerto Rican Commonwealth is part of the United States. The nativity questions used in the survey instrument were not worded so as to exclude birth in Puerto Rico as an option.

Language Usage

The frequency distributions for responses to a number of questions concerning general language usage are presented for the Hispanic subgroups in Table 8. The information provided by answers to these questions, and the patterns of preference for using Spanish and English that emerge demonstrate that the social circumstances of speech, i.e., the settings, participants, and functions of communication, and not just self-judged proficiency in languages, are critical determinants of language choice. This result is consistent with the findings of previous sociolinguistic research. While the overwhelming majority of the respondents to the survey indicated that English was their best language in their answers to SDQ question 38, the data indicate that respondents were not at all infrequent speakers of Spanish.

About 40 percent of the total sample reported that English was their first language, 46 percent reported that Spanish was, and a little under 15 percent reported both languages were. Once again subgroup differences were evident in the responses to this question. The majority of Mexican Americans reported English as their first language, while the majority of Cuban Americans, Other Hispanics, and Puerto Ricans first spoke Spanish. The dominance of Spanish as a first language is particularly strong in Cuban Americans, a finding that is congruent with the fact that less than 2 percent of the parents of the Cuban Americans were born in the United States (see Table 7.)

In response to the question, Which language was usually used at their parents' home?, 30 percent of the students reported English, 41 percent reported Spanish, and 29 percent reported both languages. Thus 70 percent of this sample came from either bilingual or Spanish-dominant homes. Across subgroups, differences in the pattern of language usage at home were evident. Forty-seven percent of Mexican Americans had lived in homes where English was the usual language, while 55 percent of the Puerto Ricans and 47 percent of the Other Hispanics had lived in Spanish-dominant households. The overwhelming majority of Cuban Americans, however, came from homes where English and Spanish were used with equal frequency. This contrasts with the data on first language spoken and on parental nativity from which one might expect greater use of Spanish in Cuban-American families. However, it agrees with Laosa's (1975) finding that Cuban-American children preferred to use English at home more than their parents did and that Cuban-American children were more similar to Mexican Americans in this respect than to Puerto Ricans.

Bilingualism is evident in the respondents' interactions with their peers, though it is not the predominant pattern of language use. About 68 percent and 74 percent report that

Table 9. Mean Extent of Language Usage in Everyday Situations

Situations	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
Use with mother					
M	3.91	2.14	3.37	2.97	2.81
SD	1.18	1.49	1.60	1.71	1.65
Mother uses					
M	4.46	2.53	3.83	3.45	3.26
SD	0.87	1.57	1.46	1.68	1.65
Use with father					
M	3.90	2.06	3.30	2.98	2.77
SD	1.23	1.49	1.62	1.70	1.67
Father uses					
M	4.28	2.34	3.64	3.36	3.09
SD	0.98	1.53	1.52	1.68	1.60
Parents use with each other					
M	4.80	2.87	4.06	3.71	3.56
SD	0.53	1.55	1.37	1.68	1.60
Siblings use					
M	2.13	1.46	2.61	1.93	1.87
SD	0.92	0.89	1.58	1.16	1.20
Close relatives use					
M	4.11	2.77	3.68	3.29	3.26
SD	0.98	1.17	1.28	1.43	1.31
Use with friends					
M	1.88	1.37	2.45	1.52	1.70
SD	0.71	0.78	1.51	0.96	1.08
Use with other students					
M	1.68	1.25	1.77	1.32	1.44
SD	0.64	0.52	0.88	0.58	0.68
Use in stores at home					
M	1.89	1.26	2.47	1.49	1.65
SD	0.86	0.67	1.68	0.99	1.14
Use in stores at school					
M	1.32	1.07	1.21	1.09	1.14
SD	0.55	0.32	0.65	0.43	0.47
Use at work					
M	1.78	1.35	1.62	1.36	1.47
SD	0.97	0.69	1.13	0.69	0.86
Number responding	102–114	331–338	144–151	111–119	689–722

Note: Scale was from (1) "always English" to (5) "always Spanish." Therefore a relatively higher score indicates relatively greater use of Spanish.

they use English exclusively with their high school friends and college friends, respectively. A large majority of Mexican Americans and Other Hispanics use English exclusively with their friends while 40 to 50 percent of Cuban Americans and Puerto Ricans use both Spanish and English or Spanish predominantly. The proportion of Puerto Ricans who use Spanish predominantly with their friends in high school is particularly high. This may be due to factors such as living in communities that are predominantly Hispanic or the possibility that many of the Puerto Rican students who were not born in the continental United States immigrated very recently (see Table 7) and may have attended high school in Puerto Rico. Recall that there is an ambiguity in Puerto Ricans' responses to the nativity question since Puerto Rico is part of the United States.

A more detailed examination of which language is used most frequently in specific situations in the home and in the community is presented in Table 9. For the total group of Hispanic respondents, a distinct pattern can be seen. Students tend to use Spanish more frequently than English with their parents than their parents do with each other (mean >2.5). However, English is the dominant language used with contemporaries such as siblings, friends, and other students and in the outside community (stores and work). Across subgroups there tends to be a consistent pattern in the ordering of the relative use of English and Spanish. Mexican Americans report the most use of English followed by Other Hispanics, then Puerto Ricans, and finally Cuban Americans. However, there are a few interesting reversals in rank order between Cuban Americans and Puerto Ricans. While Cuban Americans report more Spanish usage with and by parents than Puerto Ricans do, Puerto Ricans report

Table 10. Frequency of Various Literacy Activities in English and in Spanish Reported by Respondents

Activity	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
Median books read per year for pleasure					
English	5.0	5.5	4.4	5.0	5.1
Spanish	1.3	1.1	1.5	1.2	1.2
Median magazines read per month					
English	4.9	4.5	5.0	4.3	4.6
Spanish	1.4	1.1	1.4	1.2	1.2
Median newspapers read per week					
English	4.3	4.6	4.4	3.8	4.5
Spanish	1.2	1.1	1.4	1.1	1.2
Median letters written per year					
English	8.4	12+*	12+*	12+*	12+*
Spanish	1.6	1.4	4.4	2.3	1.8
Assist others in completing official forms**					
English	3.0	2.7	2.8	2.7	2.7
Spanish	1.9	1.4	1.9	1.6	1.6
Acted as translator for others**					
English	3.1	2.1	2.5	2.5	2.4
Spanish	2.3	1.7	2.0	2.0	1.9
Number responding	110–113	328–339	145–151	115–119	699–722

*Majority of responses were "more than 12."

**Response scale was from (1) "never" to (4) "regularly" and tabled scores are means.

Table 11. Percent of Respondents Having Bilingual Educational Experience from Grade School Through College

	Percent of Respondents				
Course	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
English-as-a-Second-Language					
Grades 1–6	18.4	4.7	5.5	10.2	8.0
Grades 7–9	1.8	2.4	8.3	5.0	3.9
Grades 10–12	0.0	2.1	8.9	4.2	3.5
College	5.3	0.9	16.0	4.2	5.3
Spanish as part of bilingual program					
Grades 1–6	13.2	7.7	7.5	7.6	8.5
Grades 7–9	10.5	3.6	4.8	7.6	5.6
Grades 10–12	5.3	2.7	4.8	6.0	4.1
College	3.5	1.8	6.0	2.5	3.1
Spanish-as-a-Foreign-Language					
Grades 1–6	33.6	16.0	14.6	20.2	19.2
Grades 7–9	57.0	56.8	44.1	57.1	54.3
Grades 10–12	57.0	66.5	56.2	59.7	61.7
College	24.6	21.7	25.3	21.2	22.8
Other subject in Spanish					
Grades 1–6	4.4	1.5	4.1	4.2	2.9
Grades 7–9	5.3	0.3	4.8	3.4	2.5
Grades 10–12	2.6	0.9	3.4	3.4	2.1
College	1.8	0.0	1.3	0.0	0.6
Hispanic History and Culture					
Grades 1–6	20.4	20.4	8.2	14.3	16.9
Grades 7–9	18.4	22.2	11.7	15.3	18.3
Grades 10–12	17.1	19.1	12.2	15.3	16.7
College	9.6	12.5	22.7	7.7	13.4
Number responding	111–114	335–339	144–150	118–119	711–719

Table 12. Mean Estimate of Amount of Teaching Done in Spanish in U.S. Schools from Grade School Through High School

Grades	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
Grades 1–6					
M	4.77	4.89	4.85	4.83	4.86
SD (N)	.61 (112)	.38 (329)	.63 (114)	.60 (109)	.51 (664)
Grades 7–9					
M	4.75	4.90	4.73	4.83	4.83
SD (N)	.72 (112)	.44 (333)	.85 (119)	.59 (110)	.61 (674)
Grades 10–12					
M	4.84	4.90	4.69	4.83	4.84
SD (N)	.01 (113)	.42 (334)	.94 (121)	.52 (113)	.60 (681)

Note: Response scale was from (1) "all" to (5) "none." Thus, a lower score indicates relatively more teaching conducted in Spanish than a higher one.

greater usage of Spanish with contemporaries than do Cubans. Furthermore, Puerto Ricans report comparatively higher use of Spanish in neighborhood stores. Thus, there is a suggestion here that Puerto Rican freshmen have resided and continue to reside in communities where Spanish is spoken.

The frequency with which the subjects in our sample read written materials and write letters in English and Spanish and act as translators are described in Table 10. The median frequency with which these various literacy activities occur is much higher in English than in Spanish for the total group and for subgroups individually. The students read four to five times as many books, magazines, and newspapers in English than in Spanish and wrote most of their letters in English. They assisted others in completing official forms in English and acted as translators fairly frequently.

Bilingual Education

The extent to which the survey participants were exposed to bilingual education is documented in Tables 11 and 12. Though 46 percent of the sample reported that Spanish was their first language and 41 percent reported that Spanish was the dominant language in their homes, the numbers reporting that they received instruction in English-as-a-second-language or in Spanish as part of a bilingual project are rather low. The proportion of students receiving such instruction ranges from about 8 percent in the early school years to 3 to 5 percent in junior and senior high school and college. Less than 3 percent of students received academic subject instruction in Spanish at all grade levels, excluding instruction in Spanish as a foreign language. On the other hand, the number of students who had received instruction in Spanish as a foreign language ranged from 19 percent in grade school to a high of 62 percent in high school. From 13 to 18 percent of the survey respondents had taken courses in Hispanic history and culture at some point in their education. Mexican Americans, who as a group show the greatest English-dominance, have the least exposure to bilingual education and instruction in English-as-a-second-language. Perhaps the most striking difference among the groups, however, is in the timing of receipt of bilingual education or instruction in English-as-a-second-language. The largest proportion of Cuban Americans and Other Hispanics who received these services did so in the early school years while more Puerto Ricans received these services as grade level increased. This may reflect the fact that bilingual education and instruction in English-as-a-second-language in the continental United States tend to be most prevalent in the early elementary school grades and the possibility exists that many Puerto Ricans in the present study received schooling in Puerto Rico prior to entering bilingual and English-as-a-second-language programs after migrating to the English-speaking United States.

As can be seen in Table 12, the language of instruction for most of these students was seldom Spanish for schools in the United States, (excluding Puerto Rico). Given a scale of 1 (all) to 5 (none), mean responses were very similar for the subgroups and grade levels and ranged from 4.7 to 4.9.

Proficiency

The responses to a number of questions that explored the respondents' evaluation of their proficiency in English and in Spanish are presented in tables 13, 14, and 15. As can be seen in Table 13, 84 percent and 87 percent of the respondents reported that English was their best language for schoolwork in high school and college respectively. Once again, the Puerto Rican group included a relatively large number of respondents who felt that either Spanish was their best language or that they functioned equally well in the two languages. Cuban Americans also had a relatively high percentage of students who said that they were functionally equivalent in the two languages.

The means of the respondents' estimates of their linguistic skills in English and in Spanish are presented in Table 14. Overall, there was a slight advantage in favor of comprehension over production. Respondents believed that they understood speech better than they spoke, and that they read better than they wrote. Furthermore the respondents

Table 13. Frequency Distribution for Report of Best Language for Schoolwork for Hispanic Respondents

Best Language for Schoolwork	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
High School					
English	87.4	92.9	59.9	83.8	83.6
Spanish	0.9	0.9	17.4	7.7	5.5
Both	11.7	6.2	22.8	8.5	10.9
Other	0.0	0.0	0.0	0.0	0.0
College					
English	83.9	93.5	75.0	88.1	87.3
Spanish	2.7	0.3	8.8	5.9	3.4
Both	12.5	6.2	16.2	5.9	9.2
Other	0.9	0.0	0.0	0.0	0.1
Number Responding	111–114	337–338	149–151	117–119	715–723

Table 14. Mean Self-Report of Fluency and Comprehension in English and Spanish for Hispanic Respondents

Language and Skill	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
English					
Understand speech					
M	1.11	1.09	1.31	1.24	1.16
SD	0.32	0.31	0.52	0.47	0.47
Speak					
M	1.28	1.20	1.67	1.37	1.34
SD	0.49	0.45	0.75	0.58	0.58
Read					
M	1.30	1.20	1.52	1.35	1.31
SD	0.56	0.46	0.62	0.57	0.55
Write					
M	1.49	1.35	1.90	1.57	1.52
SD	0.72	0.60	0.90	0.80	0.75
Spanish					
Understand speech					
M	1.51	2.51	1.60	2.03	2.08
SD	0.64	1.09	0.93	1.05	1.08
Speak					
M	2.03	2.97	2.05	2.49	2.55
SD	0.85	1.10	1.11	1.13	1.15
Read					
M	2.20	2.96	2.04	2.53	2.57
SD	0.95	1.17	1.11	1.13	1.16
Write					
M	2.54	3.32	2.27	2.85	2.90
SD	0.92	1.11	1.19	1.12	1.18
Number responding	114	336–338	150–151	118–119	720–722

Note: Response scale was from (1) "extremely well" to (5) "not at all." Lower score indicates greater fluency and comprehension.

judged that they understood and spoke English better than Spanish. Given a scale of 1 (extremely well) to 5 (not at all), mean responses for questions about English ranged from 1.1 to 2.9 and those about Spanish ranged from 1.51 to 3.32. In agreement with much of the other data in this report, Mexican Americans had the highest self-estimates of skill in English and the lowest self-estimates of skill in Spanish. The opposite was true for Puerto Ricans who had the lowest self-estimates of English skill and who tended to have the highest self-estimates of skill in Spanish. Cuban Americans, on the other hand, tended to give relatively high estimates of their skills in both languages.

Table 15. Mean Self-Judgments and English Language Proficiency for Academic Skills

Skill	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
Comprehension					
Of textbooks					
M	4.41	4.50	4.21	4.34	4.40
SD	0.84	0.65	0.87	0.83	0.77
Of vocabulary in texts					
M	4.14	4.27	3.90	4.05	4.14
SD	0.89	0.81	0.95	0.92	0.88
Of lectures					
M	4.55	4.52	4.27	4.35	4.44
SD	0.67	0.67	0.89	0.81	0.75
Of vocabulary in lectures					
M	4.30	4.32	4.02	4.14	4.22
SD	0.74	0.82	1.05	0.89	0.88
Writing					
Communicate information					
M	4.31	4.31	3.97	3.99	4.19
SD	0.88	0.81	1.02	0.97	0.90
Organization					
M	4.25	4.12	3.73	3.87	4.02
SD	0.92	0.91	0.99	1.08	0.97
Vocabulary					
M	4.13	4.13	3.72	3.93	4.01
SD	0.95	0.90	1.07	1.10	0.99
Grammar					
M	4.20	4.14	3.64	3.92	4.01
SD	0.87	0.87	1.14	1.10	0.99
Speaking					
Speak in class					
M	4.23	4.00	3.68	4.03	3.97
SD	0.94	1.04	1.18	1.05	1.07
Vocabulary					
M	4.13	4.10	3.62	4.02	3.99
SD	0.92	0.92	1.18	1.05	1.02
Grammar					
M	4.27	4.20	3.68	4.08	4.09
SD	0.88	0.84	1.09	0.97	0.95
Number responding	114	336–338	150–151	117–118	719–721

Note: Response scale was from (1) "poor" to (5) "excellent."

Table 15 presents the respondents' mean judgments of their English language proficiency for specific academic tasks on a scale of 1 (poor) to 5 (excellent). Again comprehension is judged better than writing or speaking. Although group differences are quite small, it is interesting to note that Cuban Americans rated themselves higher than did Mexican Americans on these academic language skills. Once again, Puerto Ricans have a lower estimate of their English skills than do the other groups.

In Table 16, we present the respondents' assessment of the effect of their language background on SAT scores, school grades, and teachers' judgments of their academic qualifications. Overall, more respondents thought that their language background affected their SAT-verbal scores (45 percent) more than their SAT-mathematical scores (9 percent). For SAT-verbal scores, about twice as many students (30 percent) thought that their language background had a negative impact rather than a positive one (15 percent). With respect to grades in high school and college, about one quarter of the students believed that they were affected by their language background. More students thought their language background had a positive effect (18 percent) rather than a negative effect (5 percent) on high school grades. However, this effect was reversed for college grades when more students thought that their language background was associated with lower grades (15 percent) rather than with higher grades (12 percent). The overwhelming majority of the respondents felt that their instructors viewed them as capable as or more capable than other students in high school (99 percent) and in college (93 percent). However, between high school and college there was a decline in the number of students who felt they were viewed as more capable, from

Table 16. Respondents' Perception of Effect of Language Background on SAT Scores, Grades in School, and Teachers' Judgments

	Percent of Group				
Measure	*Cuban American*	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
SAT-verbal score					
Lowered	39.5	21.1	42.4	30.8	30.0
Increased	13.2	17.2	11.3	16.2	15.2
No effect or can't say	47.4	61.7	46.3	53.0	54.8
SAT-mathematical score					
Lowered	4.4	2.4	11.9	5.2	5.2
Increased	2.6	5.1	2.0	3.4	3.8
No effect or can't say	93.0	92.5	86.1	91.3	91.1
High school grades					
Lowered	2.6	3.8	9.3	6.8	5.3
Increased	16.7	23.1	11.3	15.3	18.3
No effect or can't say	80.7	73.1	79.5	77.9	76.4
College grades					
Lowered	10.5	9.8	25.2	20.3	14.9
Increased	7.9	16.3	9.9	5.9	11.9
No effect or can't say	81.6	73.9	64.9	73.7	73.2
Teachers' perception of respondent in relation to other students					
High School					
Less capable	0.9	1.2	1.3	1.8	1.2
Equally capable	32.5	26.9	35.3	31.0	30.2
More capable	66.7	71.9	63.3	67.2	68.5
College					
Less capable	2.7	7.7	6.7	7.6	6.7
Equally capable	69.0	74.7	75.2	66.9	72.6
More capable	28.4	17.6	18.1	25.4	20.7
Number responding	113–114	335–338	149–151	116–118	716–721

Table 17. Influence of Accent on Performance

	Percent of Group				
	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
English has Spanish accent					
Yes	4.5	3.5	21.3	11.9	8.8
Somewhat	25.0	25.4	36.0	23.7	27.3
No	70.5	71.1	42.7	64.4	64.0
Accent leads instructors to negatively evaluate performance					
High School					
Yes	0.0	0.6	0.0	1.6	0.5
Possibly	12.5	8.5	9.5	14.5	10.3
No	87.5	90.9	90.5	83.9	89.2
College					
Yes	0.0	1.2	0.9	4.8	1.5
Possibly	12.5	17.7	26.2	23.8	20.3
No	87.5	81.1	72.9	71.4	78.2

Table 18. Mean Self-Judgments of Participation in Classroom Discussions and Instructors' Responsiveness

	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
Respondents' Participation					
Frequency*					
M	2.38	2.52	2.73	2.42	2.52
SD	0.92	0.94	1.02	0.87	0.95
Performance rating**					
M	1.98	2.22	2.37	2.23	2.22
SD	0.75	0.80	0.76	0.74	0.78
Instructors' Responsiveness					
Sensitivity to oral comments*					
M	1.99	2.02	2.12	2.18	2.06
SD	0.84	0.89	0.80	1.01	0.89
Sensitivity to written comments*					
M	1.96	2.06	2.01	2.09	2.04
SD	0.88	0.91	0.81	0.96	0.89
Number responding	111–112	337–339	149–151	117–118	716–720

*Response scale was from (1) "always" to (5) "never."
**Response scale was from (1) "excellent" to (4) "poor."

Table 19. Respondents' Judgments of Influence of Their Ethnicity on Instructors and Other Students

	Percent of Group				
	Cuban American	*Mexican American*	*Puerto Rican*	*Other Hispanic*	*Total Hispanic*
Instructors					
Associate ethnicity and academic skills					
No	45.6	49.0	36.4	52.1	46.3
Some may	48.2	44.2	55.0	38.7	46.2
Some definitely do	5.3	5.0	6.0	7.6	5.7
Majority do	0.9	1.8	2.6	1.7	1.8
Associate ethnicity with:					
Lower academic skills	9.6	18.0	18.5	19.3	17.0
Better academic skills	7.9	2.4	2.6	1.7	3.2
Neither	82.5	79.6	78.8	79.0	79.8
View respondent's English skills as detrimental					
No	78.1	69.9	56.7	66.1	67.8
Some may	19.3	22.7	32.7	28.0	25.1
Some definitely do	1.8	3.5	8.0	3.4	4.2
Majority do	0.9	3.8	2.7	2.5	2.9
Treat respondent fairly and without prejudice					
Yes	70.2	69.0	61.3	68.9	67.6
Sometimes may not	22.8	24.2	28.7	23.5	24.8
Sometimes definitely not	3.5	5.3	5.3	4.2	4.8
No	3.5	1.5	4.7	3.4	2.8
Other Students (nonminority)					
Treat respondent as equal					
Yes	67.5	55.8	47.3	62.2	56.9
Sometimes not	30.7	42.5	51.3	33.6	41.0
Almost never	1.8	1.8	0.7	4.2	1.9
Never	0.0	0.0	0.7	0.0	0.1

69 to 21 percent and an increase in those who felt they were viewed as equally capable, from 30 to 73 percent, possibly reflecting the more select nature of the college population overall. Among the Hispanic subgroups, Puerto Ricans were most likely to report that their language background had a negative impact on test scores or grades while Mexican Americans most frequently reported a positive impact.

The frequency of Spanish-accented English among the respondents and its perceived effect on performance is presented in Table 17. Only about 36 percent of the respondents thought that their English was accented. Puerto Ricans reported the highest incidence of accented English (57 percent) and Mexican Americans the lowest. The data on the perceived effect of an accent on instructors' evaluations must be viewed with caution because many of the students who said they did not have an accent replied to this question. Given this caveat, more respondents felt that an accent had a negative influence on instructors' evaluation in college (22 percent) than in high school (11 percent). Puerto Ricans, the group that reported the highest incidence of accented English, were most likely to believe that an accent had a negative influence on college instructors.

Academic Interactions in College

The final section of the questionnaire explored the subjects' evaluations of the frequency and quality of their participation in college classroom discussions and instructors' response to them (see Table 18). In addition, their perceptions of the influence of their ethnicity on instructors and other students was investigated (see Table 19). Respondents indicated that they participated a moderate amount in classroom discussions and rated their performances as fair to good. Overall, the respondents felt that instructors were usually responsive to their oral and written comments. Group differences were quite small, though Cuban Americans tended to participate the most frequently in discussions and to rate their performances the highest while Puerto Ricans participated the least and rated their performances the lowest.

Although 54 percent of the respondents believed that their instructors associated their ethnicity and their academic skills, only 20 percent indicated whether this association was negative (17 percent) or positive (3 percent) (see Table 19). About 32 percent of the respondents thought that at least some of their instructors viewed their English language skills as detrimental to their performance and at least occasionally exhibited some prejudice toward them. Interestingly, even more respondents (42 percent) felt that other students occasionally failed to treat them as equals. Among the Hispanic subgroups, Puerto Ricans appear to have experienced the most negative influences associated with their ethnicity.

Summary

It is clear from the replies on the language survey instrument that at least 70 percent of the Hispanic freshmen surveyed are bilingual to some extent and have a history of exposure to both Spanish and English as everyday languages of communication. The respondents tend to use Spanish at home with their parents and to use English with their contemporaries and outside their homes. Despite the incidence of bilingualism in the sample, only a relatively small proportion of these first-year college students were exposed to some sort of bilingual educational experience in schools in the United States. Most of the respondents were English dominant with respect to literacy activities such as reading books and newspapers. Furthermore, they felt that English was their best language for educational purposes and considered themselves more proficient in English than in Spanish. A significant proportion of the respondents thought that their language background had a negative effect on their SAT-verbal scores (30 percent) and on their college grades (15 percent). Furthermore, a noticeable number of respondents believed that their language background and ethnicity had a negative influence on the perceptions of themselves by their instructors and fellow students.

Differences that emerged among subgroups are in accord with differences in immigration history but also may have been influenced by other factors such as the ties maintained with the mother country and the type of community in which the respondents live. Mexican Americans who have the longest history of residence in the United States also have the greatest English dominance. On the other hand, even though more Puerto Ricans than Cuban Americans or Other Hispanics were born in the United States, Puerto Ricans as a group had the least English dominance. There are three factors that could have contributed to this finding. First, the Puerto Ricans are a heterogeneous group. While the data are not capable of supporting a definite conclusion, it appears that many of the Puerto Ricans in this study came to the continental United States during early adolescence, and not just during early childhood. Secondly, because of the ease of travel between Puerto Rico and mainland United States, much back and forth migration occurs and strong ties with Puerto Rico are maintained. Finally, previous research has found that many Puerto Ricans have maintained their preference for use of Spanish when residing in urban areas with a high Hispanic population density.

In this section the language background of the Hispanic freshmen surveyed has been described in detail and subgroup differences have been noted. The issue of how language background is related to performance on the SAT will be discussed in the next section.

Correlations Between Language Survey Questions and Test Scores

The purpose of the present section is to summarize associations between Hispanic freshmen's responses to language survey questions and their SAT-verbal, SAT-mathematical, and TSWE scores. Only data aggregated over Hispanic subgroups are reviewed in the section. A subsequent section examines the usefulness of survey language questions as

Table 20. Correlations Between Selected Language Survey Background Questions, SAT Scores, and TSWE Scores for Hispanic Freshmen

	Correlations		
	Verbal	*Math*	*TSWE*
SDQ 38: Is English your best language?	−.19	−.09	−.25
2. What was the first language you spoke when you were a child?			
English ( )	.20	.25	.18
Spanish ( )	−.20	−.18	−.18
5. What language do the people in your parents' home usually speak?			
English ( )	.23	.21	.19
Spanish ( )	−.20	−.14	−.18
9. Was your father born in the United States?			
Yes, he was born in the U.S. ( )	.20	.20	.24
10. Was your mother born in the United States?			
Yes, she was born in the U.S. ( )	.21	.22	.28

Note: The sample size varied between 593 and 681. All correlations are significantly different from 0 at the $p < .01$ level, single tailed significance test.

Table 21. Language Use Questions

8. To what extent (degree) are English and/or Spanish spoken by the person underlined in each of the situations listed below? (MARK ONE FOR EACH LINE)

	Always English	*More English than Spanish*	*English and Spanish Equally*	*More Spanish than English*	*Always Spanish*	Correlations *Verbal*	*Math*	*TSWE*
The language(s) used when...								
a. *You* speak to your mother	( )	( )	( )	( )	( )	−.30	−.28	−.28
b. Your *mother* speaks to you	( )	( )	( )	( )	( )	−.27	−.28	−.26
c. *You* speak to your father	( )	( )	( )	( )	( )	−.28	−.28	−.27
d. Your *father* speaks to you	( )	( )	( )	( )	( )	−.26	−.26	−.25
e. Your *parents* speak to each other	( )	( )	( )	( )	( )	−.28	−.29	−.25
f. You and your *sister(s) and/or brother(s)* speak to each other	( )	( )	( )	( )	( )	−.22	−.14	−.24
g. Other *immediate relatives* in the U.S. speak while around you	( )	( )	( )	( )	( )	−.15	−.15	−.13
h. *You* speak with your best friends	( )	( )	( )	( )	( )	−.20	.14	−.21
i. *You* speak with other students at school	( )	( )	( )	( )	( )	−.17	−.13	−.18
j. *You* speak in the stores you go to most often at home	( )	( )	( )	( )	( )	−.15	−.12	−.20
k. *You* speak in the stores you go to most often at school	( )	( )	( )	( )	( )	−.08	−.04	−.07
l. *You* speak at work	( )	( )	( )	( )	( )	−.07	−.11	−.09
	1	2	3	4	5			

Note: The sample size varied between 593 and 681. $|r| \geq .07$ significant at the $p < .05$ level; $|r| \geq .10$ are significant at the $p < .01$ level, single tailed significance test.

predictors of SAT-verbal scores for the separate Hispanic groups.

Table 20 displays correlations of SAT and TSWE scores with answers to selected language survey questions. The language survey questions focus on students's first language, language usually spoken in the home, and mother's and father's nativity.

The point biserial correlation between "Yes"–"No" responses to SDQ 38 (Is English your best language?) and the various test scores are presented at the top of Table 20; this correlation was −.19 for SAT-verbal scores, −.09 for SAT-mathematical scores, and −.25 for TSWE scores. "Yes" answers to SDQ 38 were coded "1" while "No" answers were coded "2" and this coding accounts for the negative size of the correlation. A correction of the point biserial correlations to adjust for the high proportion of "Yes" responses to SDQ 38 was not undertaken; such a correction would have resulted in higher correlations, but it would have resulted in a less direct comparison of SDQ 38 and language survey question items as predictors of SAT and TSWE scores.

The particular question items given in Table 20 were all selected because they manifested correlations with SAT-verbal scores, SAT-mathematical scores, or TSWE scores, which exceeded the absolute value of the −.19 correlation between SDQ 38 responses and SAT-verbal scores. The numbered language survey questions listed in Table 10 exclude individual items that did not show a correlation exceeding an absolute value of .19 with at least one of the test scores. Thus, for example, in the case of question 2 (What was the first language you spoke when you were a child?), the responses "Both" and "Other" are not represented in Table 20. The remaining response categories for question 2, "English" and "Spanish," were treated as separate dichotomous variables, and as the tabled values indicate, the correlations of these variables with SAT-verbal scores, SAT-mathematical scores, and TSWE scores were not always symmetrical across the two variables.

The correlations displayed in Table 20 indicate that Hispanic freshmen whose first language was English and who came from homes where English is usually spoken earned higher SAT-verbal and SAT-mathematical scores, and also higher TSWE scores, than other Hispanics. The data also indicate that Hispanic freshmen whose parents were born in the United States also earned higher SAT and TSWE test scores. It is important to note that these statistically significant associations are not causal in nature, and that their presence is no doubt mediated by other background and personal factors, such as family SES level, parental education, and students' school experiences, students' aspirations, and so on.

Table 21 displays the correlations of Hispanic freshmen's responses to questions about Spanish-English language preferences with the SAT and TSWE scores of students. Questions 8a through 8g pertain to the language choice preferences of the Hispanic freshmen themselves or else to the perceived language choice preferences of other family members in home settings. The results indicate that freshmen who prefer to use English more than Spanish and who are exposed more to English than to Spanish at home earn significantly higher SAT-verbal, SAT-mathematical, and TSWE scores.

Question 8h through 8l pertain to Hispanic freshmen's Spanish-English language choice preferences when they speak to friends, students, or to others in commercial and work situations. The results again indicate that students' preference for using English over Spanish is significantly associated with higher SAT and TSWE scores, though the magnitude of these relationships is slightly lower than is the case for questions 8a through 8g.

The association between preference for use of English over Spanish and higher SAT and TSWE scores may arise for several reasons. First, freshmen may prefer one language over the other more often because they are more proficient in the preferred language, and hence test scores based on tests administered in English correlate with students' English language proficiency; this is an extremely important possibility to keep in mind. Also, preference for English may be indicative of greater acculturation among freshmen to behavior and cultural contexts that are allied with English-language schooling and hence with the ability to develop the skills assessed by college aptitude tests.

Table 22 presents correlations of Hispanic freshmen's self-ratings of proficiency in orally understanding, speaking, reading, and writing in English and Spanish with SAT and TSWE test scores. The English language data indicate that freshmen's self-ratings of English language ability correlate significantly in the expected direction with SAT-verbal, SAT-mathematical, and TSWE scores. The tabled correlations are negative because the orientation of the scale for self-ratings assigned a 1 to the rating "Extremely well," and a rating of 5 to the rating "Not at all." The magnitude of the correlations for self-ratings of English proficiency is clearly the highest for SAT-verbal and TSWE scores; they are noticeably lower for SAT-mathematical scores, as would be expected, though they retain statistical significance. It is clear that the self-ratings of proficiency in English correlate noticeably and consistently higher with SAT-verbal and TSWE scores than do responses to existing SDQ 38 (Is English your best language?). In evaluating these results, it is important to consider that the information requested by question 6 is likely to reflect self-judgments of advanced verbal ability and not just elementary proficiency in English. Hence, the results are not surprising given this possible interpretation of the self-rating questions. It is also important to note that the distribution of responses to question 6 items tended to be skewed: most freshmen responded "Extremely well" or "Well" to the items. This pattern seems appropriate given the college status of the respondents, but the reported correlations may be attenuated by restriction-of-range effects. A more extended scale of responses would have been useful; conceivably this would have increased the correlations reported.

As shown in the lower half of Table 22, the correlations between self-ratings of proficiency in Spanish and SAT and TSWE scores indicate that higher proficiency in Spanish is associated significantly with lower SAT and TSWE scores. Recall that the scale for self-ratings would assign a low number to a higher proficiency rating. The Hispanic students in the present study manifested negative correlations between their self-ratings of English language proficiency and their self-ratings of Spanish language proficiency; these correlations ranged in magnitude from −.23 to −.09. A similar result was reported by Nielsen and Fernandez (1981) in their analysis of self-ratings of English and Spanish proficiency among Hispanic high school sophomores and juniors. Nielsen and Fernandez (1981), however, found small positive relationships between self-ratings of Spanish proficiency and high school achievement measures, including achievement test scores. As discussed earlier, they also found that self-ratings of Spanish proficiency entered as statistically significant positive predictors of achievement measures in regression analyses that controlled for students' English language proficiency, propensity to use Spanish, length of

Table 22. Correlations Between Self-Ratings of Global Language Proficiency and SAT and TSWE Scores

	Correlations		
	Verbal	*Math*	*TWSE*
SDQ 38: Is English your best language?	−.19	−.09	−.25
6. With regard to ***English***, how well do you do the following?			
How well do you... (Extremely well / Well / Moderately well / Not very well / Not at all)			
a. Understand English when people speak it? ( ) ( ) ( ) ( ) ( )	−.29	−.13	−.31
b. Speak in English? ( ) ( ) ( ) ( ) ( )	−.35	−.15	−.36
c. Read in English? ( ) ( ) ( ) ( ) ( )	−.35	−.10	−.31
d. Write in English? ( ) ( ) ( ) ( ) ( )	−.34	−.15	−.39
1 2 3 4 5			
6. With regard to ***Spanish***, how well do you do the following?			
How well do you... (Extremely well / Well / Moderately well / Not very well / Not at all)			
a. Understand Spanish when people speak it? ( ) ( ) ( ) ( ) ( )	.19	.26	.14
b. Speak in Spanish? ( ) ( ) ( ) ( ) ( )	.23	.24	.16
c. Read in Spanish? ( ) ( ) ( ) ( ) ( )	.12	.17	.11
d. Write in Spanish? ( ) ( ) ( ) ( ) ( )	.20	.20	.19
1 2 3 4 5			

Note: The sample size varied between 593 and 681. All the correlations in the table are significantly different from zero at the $p<.01$ level, single tailed significance test.

Table 23. Miscellaneous Self-Ratings of English Proficiency

	Correlations		
	Verbal	*Math*	*TWSE*
27A. Do you think your English carries a Spanish accent?			
Definitely yes	.26	.13	.25
22. How often have you acted as a translator for family members or friends in dealing with government agencies, utility companies, businesses, medical personnel, et			
How often in... (Never / Seldom / Occasionally / Regularly)			
a. English ( ) ( ) ( ) ( )	−.24	−.26	−.17
b. Spanish ( ) ( ) ( ) ( )	−.17	−.20	−.13
1 2 3 4			
17. How many books have you read for pleasure for during the past year? (MARK ONE FOR EACH LINE)			
How many in... (0-2 / 3-5 / 6-8 / 9-11 / More than 12)			
a. English ( ) ( ) ( ) ( ) ( )	.31	.07	.23
b. Spanish ( ) ( ) ( ) ( ) ( )	−.09	−.09	−.12
1 2 3 4 5			

Note: The sample size varied between 593 and 681. $|r| \geq .07$ significant at the $p < .05$ level, $|r| \geq .10$ are significant at the $p < .01$ level, single tailed test.

residence in the United States, SES level, and Hispanic subgroup identity. Further investigation is needed to clarify similarities and differences between findings of the present research and the findings of the research by Nielsen and Fernandez (1981). In the present study, it was found that higher proficiency in Spanish was allied with lower proficiency in English, and accordingly, it can be hypothesized that lack of knowledge of English accounted for the finding that judgments of higher Spanish proficiency were associated with lower SAT and TSWE test scores.

Table 23 displays correlations of three miscellaneous items involving self-rating of language proficiency with SAT and TSWE scores that were statistically significant and that exceeded correlations between SDQ 38 (Is English your best language?) and SAT and TSWE scores. Hispanic freshmen's judgment that their English carries a Spanish accent was associated significantly with lower SAT-verbal scores, SAT-mathematical scores and TSWE scores; the relationship was strongest for SAT-verbal and TSWE scores. Students' need to act as translators in either Spanish or

Table 24. Self-Ratings of Academic English Skills

	Correlations		
	Verbal	*Math*	*TWSE*
SDQ 38: Is English your best language?	−.19	−.09	−.25
23. At the present time how would you rate, overall, your skills in *English* in the following?			
I... Poorly ( ) ( ) ( ) ( ) Satisfactorily ( ) Excellently ( )			
a. Understand textbook materials	.38	.23	.32
b. Understand vocabulary terms I read	.45	.23	.38
c. Understand classroom lectures	.36	.24	.29
d. Understand vocabulary terms used in lectures	.39	.24	.34
e. Communicate required information in my written assignments	.35	.22	.35
f. Organize my writing to meet expectations	.32	.17	.31
g. Use appropriate vocabulary terms in my writing	.39	.20	.36
h. Use appropriate grammar in my writing	.38	.24	.43
i. Speak in class	.26	.17	.23
j. Use expected vocabulary in my classroom speaking	.35	.20	.34
k. Use appropriate grammar in my speaking	.35	.22	.37
1 2 3 4 5			

Note: The sample size varied between 593 and 681. All correlations are significantly different from zero at the $p < .01$ level, single tailed significance test.

English for family members was negatively associated with SAT and TSWE scores. The more students acted as translators, the lower their test scores. The act of needing to translate for family members is possibly associated with lower English proficiency and also possibly associated with lower SES status and other variables that could indirectly and directly affect students' academic development as reflected in their SAT and TSWE scores. This question needs research.

Finally, item 17a listed in Table 23 asked students to judge how many books they had read for pleasure in English over the past year. Responses to this item were noticeably correlated in the obvious direction with SAT-verbal and TSWE scores, and correlated to a lesser, but statistically significant, extent with SAT-mathematical scores.

Table 24 shows correlations between Hispanic freshmen's self-ratings of academic English skills and SAT and TSWE scores. A variety of academic facets of English language use are represented by the individual items included. The items, while general in nature, are focused. They concern various receptive and expressive uses of language, and they address grammar, vocabulary, and organized, meaning-centered facets of language use in classrooms. The correlations of responses to items with SAT-verbal scores and TSWE scores are noticeably higher than they are with SAT-mathematical scores; this result is not unexpected, of course. The size of the item correlations with SAT-verbal scores and TSWE scores is uniformly higher than the correlations between responses to SDQ 38 (Is English your best language?) and SAT and TSWE scores. Some of these correlations with SAT-verbal and TSWE scores exceed .40, but there is no consistent pattern in the correlations that suggests that the association is greater for one class of items as opposed to another. Also, there is no pattern that differentiates correlations involving SAT-verbal scores from correlations involving TSWE scores.

The academic English skills represented by the question items listed in Table 24 involve not only elementary proficiency in English, but also ability to use English at advanced levels appropriate to classroom communication. On these grounds, it is not surprising to encounter the correlations displayed. An interesting question is whether these same patterns of correlations would be obtained if nonminority, English-only background freshmen had been administered the same items. This is a question meriting further investigation, since its answer could help in teasing out the importance of English language skills to interpretation of Hispanic students' versus English-only students' SAT and TSWE scores. Alternatively it would be valuable to inquire whether foreign students from non-English-speaking backgrounds or United States minority groups from nonstandard English backgrounds would show correlations similar to those of Hispanics between academic language survey items and SAT and TSWE scores.

Table 25 displays correlations of responses to three sets of questions concerning academic experiences with SAT and TSWE scores. The question items listed in the table all show correlations with an absolute value greater than .19 with SAT-verbal scores. Recall that responses to SDQ 38 (Is English your best language?) correlated −.19 with SAT-verbal scores. Item 15a inquired whether Hispanic freshmen had received instruction in English as a foreign language. Responses to this question correlated .25 with SAT-verbal scores and .26 with TSWE scores; the correla-

Table 25. Correlations Between Academic Experience and Questions and SAT and TSWE Scores

	Correlations		
	Verbal	*Math*	*TSWE*
SDQ 38: Is English your best language?	−.19	−.09	−.25
15A. Have you had or are you taking the following courses while attending college?			
Did (do) you have... Yes / No			
a. Any English courses designed for students from non-English-speaking background ( ) ( )	.25	.16	.26
29. In your classroom interaction with instructors, how would you rate their sensitivity to the following? (MARK ONE FOR EACH LINE)			
Always / Usually / Sometimes / Almost Never / Never			
a. Sensitive to the valid points I make in my oral comments ( ) ( ) ( ) ( ) ( )	−.23	−.14	−.20
b. Sensitive to the valid points I make in my written comments ( ) ( ) ( ) ( ) ( )	−.21	−.08	−.16
1 2 3 4 5			
34. Overall, do you think that your English language skill is viewed by your instructors as detrimental to your academic performance? (MARK ONE)			
No, not at all ( ) 1	−.31	−.20	−.30
Some may ( ) 2			
A few definitely do ( ) 3			
The majority definitely do ( ) 4			

Note: The sample size varied between 593 and 681. $|r| \geq .07$ significant at $p < .05$; $|r| \geq .10$ significant at the $p < .01$ level, single tailed test.

tion with SAT-mathematical scores was .16. Questions 29 and 34 listed in Table 25 address Hispanic freshmen's subjective judgment of their effectiveness in classroom interaction and of their instructors' opinion of students' language status. As shown for the two items under question 29, students who judged that their instructors were less sensitive to their oral and written classroom contributions earned lower SAT-verbal, SAT-mathematical, and TSWE scores. In all except one instance, these associations were stronger with SAT-verbal and TSWE scores than was association of responses to SDQ 38 with SAT-verbal scores. Question 34 concerned students' judgments of whether instructors viewed students' English language skills as a detriment to academic performance. As indicated in Table 25, there was a noticeable association between judged teacher concern and lower SAT-verbal, SAT-mathematical, and TSWE scores. The associations in all three cases exceeded the correlation of SDQ 38 responses with SAT-verbal scores. The association was highest for SAT-verbal and TSWE scores.

The overall impression gained from the correlational data presented in tables 20 through 25 is that Hispanic freshmen's judgment of their English language capability in and out of the classroom is consistently and significantly associated with their SAT-verbal and TSWE scores, and to a lesser extent with their SAT-mathematical scores. The correlational data indicate that freshmen's ability and preference to use English rather than Spanish is associated significantly with higher SAT and TSWE scores. Students' global self-ratings of proficiency in aurally comprehending, reading, speaking, and writing English correlate significantly with SAT and TSWE scores in the expected direction. However, students' self-ratings of proficiency in orally comprehending, reading, speaking, and writing Spanish correlate in a negative fashion with students' SAT and TSWE scores.

The results reported in this section indicate that it is possible to identify a large number of language background questions whose responses associated more with SAT and TSWE scores than responses to SDQ 38 (Is English your best language?) associated with SAT-verbal scores.

Predicting SAT-Verbal Scores from SDQ 38 and Language Survey Question Items

The goal of the analyses described in this section was to identify language survey questions that improved significantly the prediction of SAT-verbal scores beyond the level possible if only responses to SDQ 38 (Is English your best language?) had been used. A stepwise regression analysis procedure was employed for this purpose. In the first stage of analysis, SAT-verbal scores were predicted from responses to SDQ 38 alone. Subsequently, one language survey question was introduced as an additional predictor variable, and the gain in the proportion of criterion variable variance accounted for was tested for statistical significance. This procedure was conducted for Hispanics as a whole group, and it was also conducted separately for each Hispanic subgroup included in the study. The significance testing procedure involved development of Bonferroni 90 percent and 95 percent simultaneous confidence intervals for each

Table 26. Increment in R^2 for Language Background Questions that Contribute Significantly to the Prediction of SAT-Verbal Scores

R^2 with SDQ 38 Entered Alone	*All Hispanic .04*	*Cuban American .03*	*Mexican American .02*	*Puerto Rican .01*	*Other Hispanic .07*
Language background question					
2a	.02**	NS	.04**	NS	NS
2b	.02**	NS	.04**	NS	NS
4a	NS	NS	.03*	NS	NS
5a	.04**	NS	.05**	NS	.09*
5b	.02**	NS	NS	NS	NS
6a	.06**	NS	.03**	.10**	.09*
6b	.09**	NS	.06**	.17**	NS
6c	.09**	NS	.05**	.19**	.11**
6d	.08**	NS	.04**	.16**	NS
7a	.02**	NS	.03**	NS	NS
7b	.02**	NS	.04**	NS	NS
8a	.10**	NS	.06**	.13**	.10**
8b	.05**	NS	.07**	.08**	NS
8c	.05**	NS	.10**	.08*	.09*
8d	.04**	NS	.09**	NS	NS
8e	.06**	NS	.09**	.09**	NS
8f	.02**	NS	.04**	NS	NS
8h	NS	NS	.04	NS	NS
8i	NS	NS	.03	NS	NS
9	.02**	NS	NS	NS	NS
10	.02**	NS	NS	NS	NS
15Aa	.04**	.11**	NS	NS	NS
15Ae	.02**	NS	NS	NS	NS
17a	.08**	.14**	.08**	NS	.09*
18a	.02*	NS	NS	NS	NS
18b	NS	NS	NS	NS	NS
19a	.02**	NS	NS	NS	NS
22a	.04**	NS	.05**	.12**	NS
22b	.02**	NS	NS	.09**	NS
23a	.12**	.14**	.14**	.16**	NS
23b	.18**	.19**	.15**	.25**	.12**
23c	.12**	NS	.13**	.12**	.09**
23d	.13**	.13**	.13**	.13**	.16**
23e	.10**	.17**	.09**	.16**	NS
23g	.12**	.15**	.12**	.15**	NS
23h	.11**	.15**	.11**	.14**	NS
23i	.05**	NS	.06**	.08*	NS
23j	.10**	NS	.09**	.15**	NS
23k	.10**	NS	.10**	.14**	NS
27a	.04**	NS	.03**	NS	NS
29a	.05**	NS	.08**	NS	NS
29b	.04**	NS	.07**	NS	NS
31	.03**	NS	.04**	NS	NS
32	.03**	NS	NS	.10**	NS
34	.08**	NS	.07**	.14**	NS
Sample Size	682	107	325	136	114

*p < .10, Bonferroni criterion
**p < .05, Bonferroni criterion

group in order to control for the probability of a Type I error across all significance tests. Concern for prediction of SAT-verbal scores for the separate Hispanic groups was critical because of variation in language background and other characteristics of the different groups.

Attention is given here only to prediction of SAT-verbal scores. Prediction of SAT-mathematical scores is not treated since the correlations of language survey items with SAT-mathematical scores are lower than with SAT-verbal scores. Prediction of TSWE scores is ignored, since TSWE scores

are not intended to serve as predictors of general verbal aptitude for college. Prediction of SAT-mathematical and TSWE scores from SDQ 38 and from language survey items, however, is a matter meriting separate attention outside of the present report.

Table 26 reports the results of the stepwise regression procedure in improving prediction of Hispanic freshmen's SAT-verbal scores from language survey information. Only items that proved amenable to the quantitative analysis are included. The top line entry in the table gives the R^2 statistic obtained when SAT-verbal scores are predicted for each Hispanic group from responses to SDQ 38 alone. The R^2 statistics given represent the proportion of variance in students' SAT-verbal scores, which can be accounted for by responses to SDQ 38. As can be seen, the SAT-verbal score variance accounted for varies from a low of 1 percent (for Puerto Ricans) to a high of 7 percent (for Other Hispanics). The proportion of SAT-verbal score variance accounted for among Mexican Americans is 2 percent, resembling the result for Puerto Ricans. The proportion of SAT-verbal score variance accounted for among Cuban Americans was 3 percent and this resembles the proportion of SAT-verbal score variance accounted for among Hispanics considered as a whole (4 percent). Because of the sample sizes involved, these results indicate that SDQ 38 accounts for a small, but statistically significant, proportion of SAT-verbal score variance. The results also indicate that the importance of SDQ 38 in predicting SAT-verbal scores varies according to Hispanic subgroup.

The identification codes of question items included in the language survey instrument are listed along the left column of Table 26. The entries in the body of the table indicate the additional increment in R^2, which was obtained when SAT-verbal scores were predicted by using two predictor variables: responses to SDQ 38 and responses to a given language survey item. The R^2 increment statistics tabled can be directly interpreted as the gain in percentage of SAT-verbal score variance accounted for. Numerical entries are given only for R^2 increments which were statistically significant at the $p < .10$ or $< .05$ levels. R^2 increments exceeding 10 percent are underlined. An *NS* entry indicates that an R^2 increment was not statistically significant.

A cursory inspection of the R^2 increments in Table 26 indicates that most language survey items boost prediction of SAT-verbal scores significantly for at least one grouping of Hispanics. Recall that all numerical entries in the table were found to be statistically significant at the $p < .10$ or $p < .05$ levels using a Bonferroni simultaneous confidence interval procedure. When a more stringent criterion of at least a 10 percent improvement in criterion variance accounted for is applied, however, only a few questionnaire items show such a dramatic capability of increasing the prediction of SAT-verbal scores. Before discussing these language questionnaire items in more detail, it will be helpful to look at some of the similarities and differences in the results across Hispanic subgroups.

The maximum increase in SAT-verbal score variance accounted for is 25 percent; this improvement occurs in prediction of Puerto Ricans' SAT-verbal scores utilizing question item 23b (a vocabulary comprehension self-rating item) in addition to SDQ 38 as a predictor variable. The R^2 increments reported in Table 26 seem to be smallest for the Cuban American group, as is evidenced by the large number of *NS* entries for this group, and the size of the remaining R^2 increments for this group relative to the R^2 increments for the other groups. The Other Hispanics group showed the next smallest range of R^2 increments in the prediction of SAT-verbal scores.

Examination of the pattern of R^2 increments exceeding a 10 percent improvement in prediction of SAT-verbal scores across the various Hispanic subgroups suggests that some information would be lost if prediction of SAT-verbal scores for only the Total Hispanic grouping were considered. The results for the separate groups show a noticeable patterning: some series of language items appear significant to improved prediction of SAT-verbal scores for some groups and not for others.

Attention will now be turned to an overview of relations between the content of language survey items and the amount of improved prediction of SAT-verbal scores. The discussion will be keyed to meaningful blocks of items as they occurred sequentially on the language survey instrument and as they are listed sequentially in Table 26. The copy of the language survey instrument in Appendix B includes the code for items given in Table 26 in order to facilitate interpretation of the data.

Question items 2a through 11 pertain to the background of Hispanic freshmen, the nativity of parents, respondents' self-ratings of proficiency in Spanish and English, and the patterns of social exposure of respondents to Spanish and English. Items 2a and 2b inquire about the first language spoken by respondents. The results for these items indicate that this additional information improves prediction of SAT-verbal scores by about 4 percent over the prediction possible based only on use of SDQ 38 as a predictor variable for all groupings except the Other Hispanics group. This result is important to note, given the College Board's plan to replace SDQ 38 by a new language background question asking examinees whether English was their first language. Data given in Table 20 indicate that responses to a question asking whether English was the first language would correlate equally well with SAT and TSWE scores, as do responses to existing SDQ 38. The new SDQ question appears to be a better question than existing SDQ 38 because it is less likely to make respondents feel that they are providing information that might be interpreted by others to reflect negatively on their academic abilities in English. The data of Table 20 indicate that a combined use of existing SDQ 38 and a question asking student's first language would not improve prediction of SAT-verbal scores by very much over levels that would be attainable by use of only one of these questions.

Question items 6a through 6d ask freshmen to rate their

ability in speaking, reading, writing, and aurally comprehending English. All four of these items improve prediction of SAT-verbal scores by at least 10 percent among Puerto Ricans, and with three exceptions above 8 percent for Other Hispanics, and for Hispanics as a whole. These self-ratings of English proficiency do not improve prediction of Cuban Americans' and Mexican Americans' SAT-verbal scores as much, though the improvement for Mexican Americans is significant at the $p < .05$ level. The value of these items in improving prediction of the Puerto Ricans' SAT-verbal scores is particularly noteworthy given the fact that the Puerto Rican sample of freshmen investigated had the highest incidence of a non-English background.

Language questionnaire items 8a through 8g probe freshmen's propensity or family members' propensity to rely more on English or Spanish in oral interaction among family members. These items show a noticeable ability to improve prediction of SAT-verbal scores for all the groups except for Cubans, but this improvement seldom exceeds 10 percent in the SAT-verbal score variance accounted for. Items 8a through 8e inquiring about languages used in communication with parents show the strongest ability to improve prediction. These results seem to indicate that preference for Spanish use at home is associated with lower SAT-verbal scores even when controlling for the fact that freshmen judge whether English is or is not their best language. As mentioned previously, this interpretation is not causal in nature, because other factors related to non-English language use at home may affect more directly the development of academic skills and performance on the SAT-verbal test section.

Further discussion of the remaining question items in the series 2a through 11 is not included since the R^2 increments given in Table 26 for these items do not indicate that the items stand out as those most exceptionally capable of improving prediction of SAT-verbal scores.

Questionnaire items 15Aa and 15Ae probe Hispanic freshmen's exposure in college to English language instruction and instruction in Hispanic culture and history. Questionnaire item 15Aa, addressing instruction in English-as-a second-langauge in college, improves prediction of Cubans' SAT-verbal scores by 11 percent and prediction of All Hispanics' SAT-verbal scores by 4 percent. Question 15Ae, inquiring about instruction in Hispanic history and culture, improves prediction of SAT-verbal scores by 2 percent for the All Hispanic group, but does not significantly improve prediction of SAT-verbal scores for any individual Hispanic subgroup.

Language survey items 17a through 22b asked students about some of their English and Spanish language literacy practices. Information about the number of books in English Hispanic freshmen read for pleasure during the past year (item 17a) shows the most ability to improve prediction of SAT-verbal scores. By considering this information, prediction of Cuban Americans' SAT-verbal scores was improved by 14 percent, that of Other Hispanics by 9 percent, and that of Mexican Americans by 8 percent. Prediction of Puerto Ricans SAT-verbal scores was not significantly improved by considering this information. No other questions in the set 17a through 22b showed nearly the level of efficacy of question 17a in improving prediction of SAT-verbal scores over all the groups.

Across all language survey items, the greatest improvement in prediction of SAT-verbal scores is shown by considering responses to language questionnaire items 23a through 23k. These items ask freshmen to rate their ability to use English for academic purposes. The items focus on ability to comprehend English as required in classwork and on the ability to use English appropriately in speaking and writing assignments. Virtually every one of these items improve prediction of SAT-verbal scores by at least 10 percent for Cuban Americans, Mexican Americans, and Puerto Ricans, and for Hispanics as a whole. Only two of these 12 items, however, improve prediction of Other Hispanics' SAT-verbal scores by more than 10 percent. Items 23i and 23j concern ability to speak in class and ability to use expected vocabulary in classroom speaking; these items show the lowest ability to improve prediction of SAT-verbal scores. All of the remaining items show an exceptional ability to improve prediction of SAT-verbal scores. The strongest patterns of improved prediction occur for Puerto Ricans, consistent with the fact that this group shows the least intensive background exposure to English among all of the Hispanic subgroups.

Item 27a questioned students about another aspect of their academic language proficiency. It probed the occurrence of Spanish-accented English, but it did not improve prediction of SAT-verbal scores in an exceptional fashion, though two instances of statistically significant improvement in prediction did occur.

Questionnaire items 29a through 36 listed in Table 26 ask students about their effectiveness in classroom interactions in college. With one exception, these questions did not focus on students' ability to control English grammar, vocabulary, or other structural features of English. Instead the focus was on students' self-ratings of their ability to participate effectively in classroom communication. The sole exception to this pattern was question item 34; this item asked students to rate their perception of teachers' evaluation of their English.

Interestingly, item 34 proved to be the most effective item in boosting improvement in prediction of SAT-verbal scores among items in this subset. Improved prediction of SAT-verbal scores ranged from 7 percent to 14 percent across groups for this item, with the greatest improvement in prediction occurring for Puerto Rican freshmen. None of the other items in this subset of items proved as important or as consistent across groups in improving prediction of SAT-verbal scores. However, it appears that two of these items noticeably improved prediction of Mexican Americans' SAT-verbal scores. These items involved students' judgment of the sensitivity of instructors to students' oral and written comments (items 29a and 29b).

Overall, the results of the reported regression analyses

suggest that it is possible to improve prediction of Hispanic freshmen's SAT-verbal scores beyond the levels attainable by considering information provided by SDQ 38 (Is English your best language?). This improvement results from considering further sorts of language information about students. Evidence emerged that different kinds of information about language ability and language use gathered by the language survey instrument varied in how well they could improve prediction of SAT-verbal scores across groups. There are both similarities and differences among the items that improve prediction of SAT-verbal scores across groups. The two item types that showed the greatest ability to improve prediction were of a different nature. One set involved students' reports of English versus Spanish use in their family interactions, while the other involved students' ratings of their proficiency in performing academic tasks in English. The latter set of items proved to be the most effective across groups in improving prediction of SAT-verbal scores beyond the extent possible by consideration of responses to SDQ 38 alone.

CONCLUSIONS AND RESEARCH SUGGESTIONS

In the present study we found a wide variety of information on Hispanics' language background that is of value in interpreting Hispanic students' SAT and TSWE test performance. We identified a large number of language survey questions that associated more strongly with SAT and TSWE scores than did existing SDQ 38 (Is English your best language?). Language survey question items probing preference for using Spanish versus English and freshmen's self-ratings of academic language proficiency seemed to be the most outstanding predictors of SAT-verbal scores; they also correlated to the greatest extent with TSWE scores. The negative association of preference for using Spanish with test scores cannot be intepreted causally, that is, the inference cannot be made that preference for using Spanish causes low test scores. Other factors such as English proficiency level, SES level, and quality of education are likely to be more direct causes of low SAT and TSWE scores. Many of the language survey questions improved prediction of SAT-verbal scores by 10 percent or more when used in combination with SDQ 38 to predict test scores. In addition, the importance of the language survey questions as predictors of SAT-verbal scores was affected by the Hispanic subgroup identity of survey respondents, with language survey items being the most valuable for Puerto Ricans. The Puerto Rican sample in the present study differed from the other Hispanic subgroups in the study; nearly 40 percent of Puerto Ricans judged that English was not their best language. Accordingly, one can hypothesize that regardless of subgroup identity, those Hispanics with the least proficiency in English are likely to be those for whom weighing of language information will be the most critical in evaluation credentials for college.

The Hispanic freshmen in the present study differed from their fellow non-Hispanic white freshmen largely with regard to their socioeconomic background and language characteristics, but also with regard to their overall level of performance on the SAT and TSWE tests. The Hispanic freshmen subgroups did not differ very much from each other or from non-Hispanic white students in their years of study of academic subject matter in high school and in their participation in high school curricular and extracurricular activities. However, there was a noticeable tendency for Hispanics to show slightly greater higher education aspirations than non-Hispanic white students.

The results of the present study should not be generalized unequivocally to Hispanic first-year college students at large. Although the results can be generalized to Hispanic students attending the particular institutions selected for study, this inference is warranted only to the extent that the respondents to the survey represent an unbiased sample of all Hispanics attending the institutions in question. The institutions selected for study were not randomly sampled from the College Board Summary Reporting Service data base, hence, the accuracy of the results with regard to the full population of institutions participating in the Summary Reporting Service cannot be determined.

The present study has stopped short of demonstrating that additional language information is useful in predicting Hispanics' achievement in college. This further work is strongly recommended as a follow-up to the present study. There is a special need to examine whether the ability of SAT test scores and high school grades to predict college achievement is moderated by information related to students' language background, language use patterns, and self-ratings of language proficiency in English and in Spanish. A follow-up study should investigate whether prediction of Hispanic students' college grade-point average during the freshman year can be improved significantly by introducing language information of the sort identified as important in the present study as additional predictors of grades, in addition to high school grade-point average and SAT test scores. A moderator study should investigate whether an interaction term involving English-language-proficiency level and SAT-verbal scores should be introduced into regression equations predicting college grade-point average from high school grades, admissions test scores, and English-language-proficiency level.

Apart from investigation of the foregoing question, another important question to be investigated is whether some of the language survey items in the present study might improve prediction of college grades by acting as suppressor variables in the prediction of college grade-point average from SAT scores and high school grades. A suppressor effect would occur, for example, in an instance where a language question had a low correlation with college grade-point average, but where introduction of the language question in the college grade-point prediction equation would subtract out the variance in SAT-verbal scores which was related to

students' language characteristics, but not to their college grade-point average. A result of this sort could be of immense value to admissions staff judging Hispanic college candidates' potential for success in college.

In addition to examination of college grades as a criterion variable representing achievement, it should prove useful to investigate the freshman course-taking patterns of Hispanic students with different language characteristics in light of their college grades and aspirations. This seems of great practical importance in advising Hispanic students of optimal ways for achieving their higher-education objectives.

Other research is also needed. Practical use of language survey questions of the sort examined in this study should follow an intensive investigation of the reliability and construct-validity of question items in an operational testing program context. Research is needed establishing the internal consistency and test-retest reliability of question items, and on ways to improve the content and response scales of items. Attention should also be given to students' acceptance of question items outside the contexts of a specialized study; it is important to ensure that students will not find items personally intrusive or objectionable when items are administered under operational circumstances. In addition, there is a need to investigate the relationship of responses on survey items to performance on objective tests of Spanish and English language proficiency. This latter research will help in evaluating the extent to which items reflect language proficiency as opposed to other constructs. It would also be valuable to investigate the nature of relationships of scores on objective Spanish and English proficiency tests with SAT test scores, TSWE scores, high school grades and measures of college achievement. These results could be compared and evaluated in light of relationships among responses to language survey items, test scores, high school grades, and college grades.

In closing, it is important to remind the reader that language factors are not the only, or even the most important, factors contributing to Hispanics' progress in school and attainment of a college education. Also, language factors may vary in their effects on school progress and test performance across Hispanic subgroups, within subgroups, and for Hispanics with certain backgrounds and not others. A balanced perspective is called for which is sensitive to the wide range of personal and social backgrounds and institutional factors potentially affecting Hispanics' educational progress. Research is needed clarifying the contribution of different factors to Hispanics' preparation for college.

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Appendix A. General Outline of Communication Skills

Michael Canale, O.I.S.E., Toronto

(Prepared for the project "Discourse Skills and the TOEFL" directed by Richard Durán, Educational Testing Service.)

COMPETENCE AREA	RELEVANT MODE(S)
A. Grammatical competence	
1. Pronunciation:	
1.1. Lexical items in connected speech (at normal rate of speech)	L, S, R (oral)
1.2. Modifications to normal pronunciation of lexical items at word boundaries (e.g. liaison and elision) and in unstressed syllables (e.g. vowel and consonant reduction)	L, S
1.3. Normal word stress in connected speech	L, S, R (oral)
1.4. Emphatic or contrastive word stress (e.g. Mary is happy but Paul is unhappy.)	L, S, R (oral)
1.5. Normal intonation patterns in connected speech (e.g. for imperatives, interrogatives, etc.)	L, S
1.6. Emphatic or contrastive intonation patterns for different clause types (e.g. He has arrived? with rising intonation to signal an interrogative)	L, S, R (oral)
1.7. Normal pauses, loudness and rate of speech	L, S
1.8. Modifications to normal pauses, loudness and rate of speech for emphatic or contrastive purposes	L, S
2. Orthography:	
2.1. Graphemes (individually and in sequence)	R, W
2.2. Spelling (including capitalization and diacritics) for individual lexical items	R, W

2.3.	Spelling of compounds (e.g. use of hyphens as in lion-like, level-headed and vice-president)	R, W
2.4.	Spelling of contractions (e.g. can't)	R, W
2.5.	Spelling of abbreviations (e.g. cont'd)	R, W
2.6.	Spelling of possessive noun forms (e.g. John's)	R, W
2.7.	Common punctuation conventions (e.g. capitalization at beginning of a sentence and use of commas, quotes, etc.)	R, W
2.8.	Conventions for marking emphasis (e.g. underlining, italics, bold-face type, capitalization)	R, W

3. Vocabulary:

3.1.	Literal meaning of common content words, in context, related to academic and social topics	L, S, R, W
3.2.	Literal meaning of common function words in context (e.g. prepositions, articles)	L, S, R, W
3.3.	Meaning of idioms and formulaic expressions in context (e.g. That test was her Little Big Horn; Take care!)	L, S, R, W
3.4.	Extended or figurative meaning of words in context (e.g. metaphorical uses of words as in Marriage is a business partnership)	L, S, R, W
3.5.	Synonyms, antonyms and homonyms of common content words in context	L, S, R, W

4. Word formation:

4.1.	Inflection, in context, of nouns for number	L, S, R, W
4.2.	Inflection, in context, of demonstrative and psssessive adjectives for number	L, S, R, W,
4.3.	Inflection, in context, of verbs for person, number and tense	L, S, R, W
4.4.	Agreement, in context, of pronouns with nouns	L, S, R, W
4.5.	Agreement, in context, of demonstrative and possessive adjectives with nouns and pronouns	L, S, R, W

4.6. Agreement, in context, of nouns and pronouns with verbs (person and number for verbs, case for pronouns) L, S, R, W

4.7. Derivational relationships (e.g. among attacker and attack as a verb or noun) in context L, S, R, W

4.8. Variation at word boundaries in context (e.g. a and an) L, S, R, W

5. Sentence formation:

5.1. Basic form of common sentence and subsentence structures, in context, relevant to academic and social language-use situations (e.g. subject - verb - complement word order for a simple declarative sentence) L, S, R, W

5.2. Literal meaning of a sentence having a given structure (with vocabulary), in context L, S, R, W

B. Sociolinguistic competence

1. In academic and social situations that vary according to sociolinguistic variables such as number and status of participants (e.g. peers, strangers, authorities), setting (e.g. formal/informal, public/private, familiar/unfamiliar), channel (e.g. face-to-face, radio, letter, telephone), purpose (e.g. routine/unusual, open-ended/fixed) and amount of shared information:

1.1. Grammatical forms (i.e. pronunciation, etc.) appropriate for different communicative functions such as supplying or requesting information, persuading, seeking approval, inviting, promising, complaining, socializing, etc. L, S, R, W

1.2. Formulaic expressions appropriate for different communicative functions (e.g. Hello/Goodbye on the telephone rather than in written communication) L, S, R, W

1.3. Appropriate grammatical forms for signaling attitudes (e.g. politeness, sincerity, empathy, certainty, anger) L, S, R, W

1.4. Grammatical forms as indicators of social and geographical background (e.g. dialect features) L, S, R, W

C. Discourse competence

1. Cohesion in genres of discourse relevant to academic and social language use:

1.1. Lexical cohesion devices for:

conciseness: e.g. pronouns, synonyms

continuity: e.g. repetition of a vocabulary item

transition: e.g. logical connectors such as however

emphasis: e.g. choice of unexpected vocabulary L, S, R, W

1.2. Grammatical cohesion devices for:

conciseness: e.g. ellipsis

continuity: e.g. parallel structures, lists

transition: e.g. transitional sentences to introduce ideas

emphasis: e.g. focussing structures such as What is needed is ... L, S, R, W

2. Coherence in genres of discourse relevant to academic and social language use:

2.1. Conversational discourse patterns: turn-taking rules (as in a telephone conversation) L, S

2.2. Conversational discourse patterns: acceptable organization of ideas (literal meanings and communicative functions) in conversation in terms of:

development: e.g. sequencing and direction of ideas

continuity: e.g. relevance and consistency of ideas

balance: e.g. treatment of main vs supporting ideas

completeness: e.g. thorough discussion of a topic L, S, R, W

2.3. Nonconversational discourse patterns: acceptable organization of ideas (literal meanings and communicative functions) in terms of:

development

continuity

balance

completeness L, S, R, W

3. Transposing information in nonverbal/graphic form to and from oral and written discourse (e.g. diagrams, graphs and tables) L, S, R, W

D. Strategic competence

1. Compensatory strategies for grammatical difficulties:

1.1.	Reference books (e.g. dictionary, grammar book)	R, W
1.2.	Reference centres (e.g. library, resource centre), including use of index cards, knowledge of Dewey decimal system	R, W
1.3.	Phonetic spelling as a guide to pronunciation (e.g. International Phonetic Alphabet)	S, R
1.4.	Grammatical and lexical paraphrase (e.g. use of general vocabulary items such as place, person, thing, way followed by a descriptive phrase; use of structures such as ask someone - infinitive rather than demand that - subjunctive)	L, S, R, W
1.5.	Form of requests for repetition, clarification or slower speech	L, S
1.6.	Use of nonverbal symbols (e.g. gestures, drawings)	L, S, R, W
1.7.	Use of contextual clues for inferences about literal meaning of unfamiliar vocabulary and structures	L, S, R
1.8.	Use of word formation rules to draw inferences about literal meaning of unfamiliar vocabulary and structures (e.g. coinage of fish-house to express aquarium)	L, S, R, W
1.9.	Other (e.g. avoidance of unfamiliar topics, memorization of certain verbal repertoires)	L, S, R, W

2. Compensatory strategies for sociolinguistic difficulties:

2.1.	Single grammatical form for different communicative functions (e.g. a declarative such as Dinner is at 5:00 with varying intonation to signal a statement, a question, a promise, an order, an invitation--all depending on sociolinguistic context)	L, S, R, W
2.2.	Use of sociolinguistically neutral grammatical forms when uncertain about appropriateness of other forms in a given sociolinguistic context (e.g. in meeting someone, omission of the person's name if unsure about using his or her first name versus title)	S, W
2.3.	Use of first language knowledge about appropriateness of grammatical forms or communicative functions in a given sociolinguistic context	L, S, R, W

2.4. Use of contextual clues for inferences about social meaning (communicative function, etc.) in unfamiliar sociolinguistic situations or when unfamiliar grammatical forms are used — L, S, R

3. Compensatory strategies for discourse difficulties:

3.1. Use of nonverbal symbols or of emphatic stress and intonation to indicate cohesion and coherence (e.g. use of drawings to indicate sequencing of actions/ideas) — S, W

3.2. Use of first language knowledge about oral/written discourse patterns when uncertain about such aspects of discourse in second language — L, S, R, W

3.3. Use of contextual clues for inferences about patterning of literal and social meanings in unfamiliar discourse — L, S, R, W

4. Compensatory strategies for performance limitations:

4.1. Coping with background noise, interruptions, frequent changes in topic/interlocutors, and other distractions — L, S, R, W

4.2. Use of pause fillers (e.g. well, you know, my, my) to maintain one's turn in conversation while searching for ideas or grammatical forms or while monitoring them) — L, S

5. Rhetorical enhancement strategies (noncompensatory):

5.1. In oral and written discourse, use of structures and vocabulary for special effect (e.g. use of adverbial phrase preposing as in Out of the woods came ...) — L, S, R, W

5.2. In oral discourse, use of slow, soft, deliberate speech for special effect — L, S

5.3. In oral and written discourse, use of literary devices (sentence rhythm, alliteration, literary references) — L, S, R, W

Appendix B. Student Questionnaire

Language Factors and Hispanic

Freshmen's Student Profile

PLEASE FILL OUT THE ATTACHED QUESTIONNAIRE CAREFULLY. IT IS IMPORTANT THAT YOU ANSWER ALL QUESTIONS. RETURN THE QUESTIONNAIRE AND YOUR SIGNED CONSENT FORM IN THE ATTACHED POSTAGE PAID ENVELOPE WITHIN 2 WEEKS OF RECEIPT.

Analysis Code Identifier

1. How would you describe yourself? (MARK ONE)

Mexican-American or Chicano	( )	1	
Puerto Rican.	( )	2	
Cuban-American.	( )	3	
Other Hispanic: (Write in)_____	( )	4	
Other: (Write in)_____	( )	5	

2. What was the first language you spoke when you were a child? (MARK ONE)

English	( )	1	2a
Spanish	( )	2	2b
Both.	( )	3	
Other: (Write in)_____	( )	4	

3. What language did you speak among your friends in high school? (MARK ONE)

English	( )	1	
Spanish	( )	2	
Both.	( )	3	
Other: (Write in) _____	( )	4	

4. What language do you speak among your friends at college? (MARK ONE)

English	( )	1	4a
Spanish	( )	2	4b
Both.	( )	3	
Other: (Write in)_____	( )	4	

5. What language do the people in your parents' home usually speak? (MARK ONE)

English . . . . . .( )	1	5a
Spanish . . . . . .( )	2	5b
Both. . . . . .( )	3	
Other: (Write in)_____( )	4	

6. With regard to English, how well do you do the following?

(MARK ONE FOR EACH LINE)

How well do you . . .	Extremely well	Well	Moderately well	Not very well	Not at all	
a. Understand English when people speak it	( )	( )	( )	( )	( )	6a
b. Speak in English	( )	( )	( )	( )	( )	6b
c. Read in English	( )	( )	( )	( )	( )	6c
d. Write in English	( )	( )	( )	( )	( )	6d
	1	2	3	4	5	

7. With regard to Spanish, how well do you do the following?

(MARK ONE FOR EACH LINE)

How well do you . . .	Extremely well	Well	Moderately well	Not very well	Not at all	
a. Understand Spanish when people speak it	( )	( )	( )	( )	( )	7a
b. Speak in Spanish	( )	( )	( )	( )	( )	7b
c. Read in Spanish	( )	( )	( )	( )	( )	
d. Write in Spanish	( )	( )	( )	( )	( )	7d
	1	2	3	4	5	

8. To what extent (degree) are English and/or Spanish spoken by the person underlined in each of the situations listed below? (MARK ONE FOR EACH LINE)

The language(s) used when. . .	Always English	More English Than Spanish	English and Spanish Equally	More Spanish Than English	Always Spanish	
a. <u>You</u> speak to your mother....	( )	( )	( )	( )	( )	8a
b. Your <u>mother</u> speaks to you...	( )	( )	( )	( )	( )	8b
c. <u>You</u> speak to your father....	( )	( )	( )	( )	( )	8c
d. Your <u>father</u> speaks to you...	( )	( )	( )	( )	( )	8d
e. Your <u>parents</u> speak to each other.....	( )	( )	( )	( )	( )	8e
f. You and your <u>sister(s) and/or brother(s)</u> speak to each other.....	( )	( )	( )	( )	( )	8f
g. Other <u>immediate relatives</u> in the U.S. speak while around you.....	( )	( )	( )	( )	( )	8g
h. <u>You</u> speak with your best friends.....	( )	( )	( )	( )	( )	8h
i <u>You</u> speak with other students at school.....	( )	( )	( )	( )	( )	8i
j. <u>You</u> speak in the stores you go to most often at home.....	( )	( )	( )	( )	( )	
k. <u>You</u> speak in the stores you go to most often at school.....	( )	( )	( )	( )	( )	
l. <u>You</u> speak at work.....	( )	( )	( )	( )	( )	
	1	2	3	4	5	

9. Was your father born in the United States? (MARK ONE) 9

Yes, he was born in the U.S. . . . . .( ) 1

No, but he's lived here about 1-2 years. . . . . .( ) 2

No, but he's lived here about 3-5 years. . . . . .( ) 3

No, but he's lived here about 6-10 years . . . . . .( ) 4

No, but he's lived here about 11-20 years. . . . . .( ) 5

No, but he's lived here about 21-30 years. . . . . .( ) 6

No, but he's lived here more than 30 years . . . . . .( ) 7

10. Was your mother born in the United States? (MARK ONE) 10

Yes, she was born in the U.S. . . . . ( ) 1

No, but she's lived here about 1-2 years . . . . . .( ) 2

No, but she's lived here about 3-5 years . . . . . .( ) 3

No, but she's lived here about 6-10 years. . . . . .( ) 4

No, but she's lived here about 11-20 years . . . . . .( ) 5

No, but she's lived here about 21-30 years . . . . . .( ) 6

No, but she's lived here more than 30 years. . . . . .( ) 7

11. Were you born in the United States? (MARK ONE) 11

Yes, I was born in the U.S. . . . . .( ) 1

No, but I've lived here about 1-2 years. . . . . .( ) 2

No, but I've lived here about 3-5 years. . . . . .( ) 3

No, but I've lived here about 6-10 years . . . . . .( ) 4

No, but I've lived here about 11-20 years. . . . . .( ) 5

No, but I've lived here more than 20 years. . . . . .( ) 6

EDUCATION IN THE UNITED STATES

This series of questions concerns subjects you may have had in school. Please answer only for education you have received in the United States, excluding Puerto Rico.

12A. Did you have the following courses in grades 1-6? (MARK ONE FOR EACH LINE)

Did you have . . .	Yes	No	Did not live in U.S. in grades 1-6	
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	( )	
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	( )	
c. Reading and writing in Spanish as a foreign language courses	( )	( )	( )	
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	( )	
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	( )	12Ae
	1	2	3	

12B. In each case where you answered YES above how much did these courses help you do better in school? (MARK ONE FOR EACH LINE)

How much help were . . .	Very much	Some-what	Very little	Not at all	Not sure	Does not apply	
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	( )	( )	( )	( )	12Ba
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	( )	( )	( )	( )	
c. Reading and writing in Spanish as a foreign language courses	( )	( )	( )	( )	( )	( )	
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	( )	( )	( )	( )	
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	( )	( )	( )	( )	
	1	2	3	4	5	6	

13A. Did you have the following courses in grades 7-9? (MARK ONE FOR EACH LINE)

Did you have . . .	Yes	No	Did not live in U.S. in grades 7-9
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	( )
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	( )
c. Reading and writing in Spanish as a foreign language courses	( )	( )	( )
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	( )
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	( )
	1	2	3

13B. In each case where you answered YES above how much did these courses help you do better in school? (MARK ONE FOR EACH LINE)

How much help were . . .	Very much	Some-what	Very little	Not at all	Not sure	Does not apply
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	( )	( )	( )	( )
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	( )	( )	( )	( )
c. Reading and writing in Spanish as a foreign language courses	( )	( )	( )	( )	( )	( )
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	( )	( )	( )	( )
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	( )	( )	( )	( )
	1	2	3	4	5	6

14A. Did you have the following courses in grades 10-12? (MARK ONE FOR EACH LINE)

Did you have . . .	Yes	No	Did not live in U.S. in grades 10-11	
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	( )	14Aa
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	( )	14Ab
c. Reading and writing in Spanish as a foreign language courses	( )	( )	( )	
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	( )	
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	( )	
	1	2	3	

14B. In each case where you answered YES above how much did these courses help you do better in school? (MARK ONE FOR EACH LINE)

How much help were . . .	Very much	Some-what	Very little	Not at all	Not sure	Does not apply
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	( )	( )	( )	( )
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	( )	( )	( )	( )
c. Reading and writing in Spanish as a foreign language courses	( )	( )	( )	( )	( )	( )
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	( )	( )	( )	( )
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	( )	( )	( )	( )
	1	2	3	4	5	6

15A. Have you had or are you taking the following courses while attending college? (MARK ONE FOR EACH LINE)

Did (do) you have . . .	Yes	No	
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	15Aa
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	15Ab
c. Reading and writing in Spanish as a foreign language courses	( )	( )	
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	15Ad
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	15Ae
	1	2	

15B. In each case where you answered YES above how much did these courses help you do better in college? (MARK ONE FOR EACH LINE)

How much help were (are) . . .	Very much	Some-what	Very little	Not at all	Not sure	Does not apply
a. Any English courses designed for students from non-English speaking backgrounds	( )	( )	( )	( )	( )	( )
b. Reading and writing in Spanish while enrolled in a bilingual program	( )	( )	( )	( )	( )	( )
c. Reading and writing in Spanish as a foreign language courses	( )	( )	( )	( )	( )	( )
d. Other subjects, such as math or science, taught, at least in part, in Spanish	( )	( )	( )	( )	( )	( )
e. Courses in the history and culture of your Hispanic ancestors' country of origin or their life in the United States	( )	( )	( )	( )	( )	( )
	1	2	3	4	5	6

16A. Thinking about all the courses you had in grades 1-6, excluding any Spanish as a foreign language courses, how much of the teaching was done in Spanish? (MARK ONE FOR EACH LINE)

	All	Most	About Half	Some	None
a. In the U. S., excluding Puerto Rico	( )	( )	( )	( )	( )
b. In Puerto Rico or outside the U. S	( )	( )	( )	( )	( )
	1	2	3	4	5

16B. Thinking about all the courses you had in grades 7-9, excluding any Spanish as a foreign language courses, how much of the teaching was done in Spanish? (MARK ONE FOR EACH LINE)

	All	Most	About Half	Some	None
a. In the U. S. excluding Puerto Rico	( )	( )	( )	( )	( )
b. In Puerto Rico or outside the U. S	( )	( )	( )	( )	( )
	1	2	3	4	5

16C. Thinking about all the courses you had in grades 10-12, excluding any Spanish as a foreign language courses, how much of the teaching was done in Spanish? (MARK ONE FOR EACH LINE)

	All	Most	About Half	Some	None
a. In the U. S. excluding Puerto Rico	( )	( )	( )	( )	( )
b. In Puerto Rico or outside the U. S	( )	( )	( )	( )	( )
	1	2	3	4	5

LITERACY PRACTICES

This series of questions concerns the frequency with which you do certain reading and writing tasks.

17. How many books have you read for pleasure during the past year? (MARK ONE FOR EACH LINE)

How many in . . .	0 - 2	3 - 5	6 - 8	9 - 11	more than 12	
a. English	( )	( )	( )	( )	( )	17a
b. Spanish	( )	( )	( )	( )	( )	
	1	2	3	4	5	

18. How many magazines did you generally read each month during the past year? (MARK ONE FOR EACH LINE)

How many in . . .	0 - 2	3 - 5	6 - 8	9 - 11	more than 12	
a. English	( )	( )	( )	( )	( )	18a
b. Spanish	( )	( )	( )	( )	( )	18b
	1	2	3	4	5	

19. How many newspapers did you usually read each week during the past year? (MARK ONE FOR EACH LINE)

How many in . . .	0 - 2	3 - 5	6 - 8	9 - 11	more than 12	
a. English	( )	( )	( )	( )	( )	19a
b. Spanish	( )	( )	( )	( )	( )	19b
	1	2	3	4	5	

20. How many times per year do you write personal and/or business letters? (MARK ONE FOR EACH LINE)

How many in . . .	0 - 2	3 - 5	6 - 8	9 - 11	more than 12
a. English	( )	( )	( )	( )	( )
b. Spanish	( )	( )	( )	( )	( )
	1	2	3	4	5

21. Have you assisted family members or friends with the filling out of official forms? (MARK ONE FOR EACH LINE)

How often in . . .	Never	Seldom	Occasionally	Regularly	
a. English	( )	( )	( )	( )	21b
b. Spanish	( )	( )	( )	( )	
	1	2	3	4	

22. How often have you acted as a translator for family members or friends in dealing with government agencies, utility companies, businesses, medical personnel, etc.

How often in . . .	Never	Seldom	Occasionally	Regularly	
a. English	( )	( )	( )	( )	22a
b. Spanish	( )	( )	( )	( )	22b
	1	2	3	4	

JUDGMENTS OF LANGUAGE PROFICIENCY

This series of questions ask you to make judgments about your language proficiency and how this judged proficiency affects your school work.

23. At the present time how would you rate, overall, your skills in English in the following? (MARK ONE FOR EACH LINE)

I . . .	Poorly		Satisfactorily		Excellently	
a. Understand textbook materials	( )	( )	( )	( )	( )	23a
b. Understand vocabulary terms I read	( )	( )	( )	( )	( )	23b
c. Understand classroom lectures	( )	( )	( )	( )	( )	23c
d. Understand vocabulary terms used in lectures	( )	( )	( )	( )	( )	23d
e. Communicate required information in my written assignments	( )	( )	( )	( )	( )	23e
f. Organize my writing to meet instructor's expectations	( )	( )	( )	( )	( )	23f
g. Use appropriate vocabulary terms in my writing	( )	( )	( )	( )	( )	23g
h. Use appropriate grammar in my writing	( )	( )	( )	( )	( )	23h
i. Speak in class	( )	( )	( )	( )	( )	23i
j. Use expected vocabulary in my classroom speaking	( )	( )	( )	( )	( )	23j
k. Use appropriate grammar in my speaking	( )	( )	( )	( )	( )	23k
	1	2	3	4	5	

24. How do you think your SAT test scores were affected by your language background? (MARK ONE FOR EACH LINE)

	Lowered	Increased	Not affected	Can't say if my score was affected
a. SAT Verbal	( )	( )	( )	( )
b. SAT Mathematics	( )	( )	( )	( )
	1	2	3	4

25. How do you think your grades were/are affected by your language background? (MARK ONE FOR EACH LINE)

	Lowered	Increased	Not affected	Can't say if my grades were affected
a. In High School	( )	( )	( )	( )
b. In College	( )	( )	( )	( )
	1	2	3	4

26. Did(do) your instructors view you as academically qualified in relation to other students? (MARK ONE FOR EACH LINE)

	Not nearly as capable	Not as capable	Of the same capability	More capable	Much more capable
a. In High School	( )	( )	( )	( )	( )
b. In College	( )	( )	( )	( )	( )
	1	2	3	4	5

27A. Do you think that your English carries a Spanish accent? (MARK ONE)

Definitely yes.....( )	1	27a
Possibly somewhat.....( )	2	
Not noted at all.....( )	3	

27B. If YES, do you think that your instructors generally evaluate(d) your academic performance negatively because of an accent? (MARK ONE FOR EACH LINE)

	Definitely yes	Possibly	No, not at all	
a. In High School.....	( )	( )	( )	
b. In College.....	( )	( )	( )	27Bb
	1	2	3	

28. Which is or has been your best language for school work? (MARK ONE FOR EACH LINE)

	Spanish	English	Both	Some other language	
a. In High School.....	( )	( )	( )	( )	28b
b. In College.....	( )	( )	( )	( )	
	1	2	3	4	

ACADEMIC INTERACTION AND EXPERIENCES

This series of questions asks you to make judgments about your college instructors behavior or beliefs regarding your classroom performance.

29. In your classroom interaction with instructors, how would you rate their sensitivity to the following? (MARK ONE FOR EACH LINE)

They are . . .	Always	Usually	Sometimes	Almost Never	Never	
a. Sensitive to the valid points I make in my oral comments	( )	( )	( )	( )	( )	29a
b. Sensitive to the valid points I make in my written comments	( )	( )	( )	( )	( )	29b
	1	2	3	4	5	

30. How frequently do you participate in classroom discussions? (MARK ONE) 30

- Always.....( ) 1
- Usually.....( ) 2
- Sometimes.....( ) 3
- Almost never.....( ) 4
- Never.....( ) 5

31. How would you rate your performance in classroom discussions? (MARK ONE) 31

- Excellent.....( ) 1
- Good.....( ) 2
- Fair.....( ) 3
- Poor.....( ) 4

32. Overall, do you believe that your instructors think that your ethnicity and background is linked to your academic skills? (MARK ONE) 32

No, not at all.....( ) 1

Some may.....( ) 2

A few definitely do.....( ) 3

The majority do.....( ) 4

33. Do you think your instructors believe that you are: (MARK ONE)

Less academically skilled because of your ethnicity...( ) 1

More academically skilled because of your ethnicity...( ) 2

Neither of the above.....( ) 3

34. Overall, do you think that your English language skills is viewed by your instructors as detrimental to your academic performance? (MARK ONE) 34

No, not at all.....( ) 1

Some may.....( ) 2

A few definitely do.....( ) 3

The majority definitely do.....( ) 4

35. Do your instructors treat you fairly and without prejudice in comparison to the way they treat Anglo students? (MARK ONE) 35

Yes, always.....( ) 1

Sometimes they may not.....( ) 2

No, sometimes definitely not.....( ) 3

No, overall.....( ) 4

36. Do other students, who are not minority group members treat you as an equal? (MARK ONE) 36

Yes, always.....( ) 1

Sometimes not.....( ) 2

Almost never.....( ) 3

Never.....( ) 4

37. Comments _____

EDUCATIONAL TESTING SERVICE PRINCETON, N.J. 08541

000-021-0000
CABLE-EDUCTESTSVC

Dear Student:

The College Board and the Educational Testing Service are sponsoring a study that I have undertaken to investigate links between Hispanic students' language background and their characteristics as entering freshmen. Research of this type is needed in order to help improve our understanding of how Hispanic students' background might affect their preparation for college, access to college, and selection of areas of study. The research is responsive to Hispanic educators' concern that testing programs and colleges need to be better informed about the characteristics of Hispanic college candidates and about ways to improve access of Hispanics to college. The findings of this study will culminate in a research report that will be disseminated by the College Board. Reports on the research will also be presented to Hispanic educators at national meetings of professional associations.

Your participation in this study is strictly voluntary; you will be paid $20.00 for returning the attached questionnaire. All information requested from you will remain anonymous and will not be shared with anyone outside of the project. The college you attend will not be informed of the information you provide. The College Board and ETS in no way will make use of your participation beyond the scope of this study and they will not have access to your individual identity or responses to the questionnaire.

Your participation in this study will include allowing me to access your College Board test scores and background questionnaire responses collected at the time you last signed-up to take College Board tests. In order to access this information we will need to have you fill out the consent form below. Once we have accessed your College Board records we will destroy all information about your personal identity, so that no one will ever be able to connect your personal identity to the information we have compiled. The enforcement of these subject protection procedures is under supervision of the ETS Committee for Prior Review which is charged with upholding Federal Government, professional, and ETS standards for protection of human subjects.

Attached below is a brief signature form indicating your willingness to participate in this study. Please sign and return the form with your questionnaire. We will not be able to process your payment without your signature and social security number. In the event you have any questions please feel free to contact me.

Sincerely,

Richard P. Duran

Richard P. Duran
Research Scientist
Educational Testing Service
Princeton, New Jersey 08541

Phone: (609) 734-5704

- -

I have read the foregoing description of the "Language Factors and Hispanic Freshmen's Student Profile" study and agree to participate as described. I will be reimbursed $20.00 upon receipt of this form and a completed questionnaire. (Payments will be made in late May or June.) In order to process this reimbursement we must have your Social Security Number and the address to which you wish your reimbursement sent.

Signature _____

Social Security Number: ___ - ___ - ____

Address: _____

_____

_____

_____

This letter of support is being sent to Hispanic educators at your college.

HISPANIC HIGHER EDUCATION COALITION 1725 EYE ST., N.W. ROOM 200 WASHINGTON, D.C. 20006

TEL: 202-775-0795

April 7, 1983

Dear Colleague:

I am writing to introduce you to a study being conducted by Dr. Richard P. Durán which bodes a potential significance far beyond its modest scale. Dr. Durán is initiating a small scale survey, utilizing the resources of the Educational Testing Service, of the relevance of language background factors in the interpretation of Hispanic freshmen's student profile.

The Hispanic Higher Education Coalition is particularly interested in this well planned study because of its emphasis on exploring the possibility that a different pattern of language background and language proficiency on college preparation may exist for U.S. Hispanics having little or no formal schooling in Spanish. The Coalition concurs with Dr. Durán that research is needed to investigate how variation in Hispanics' language background and judgments of language proficiency affect what should be direct interpretation of data such as student background questionnaire responses, admissions test scores and the secondary school record.

The research is felt to be of value because it could contribute substantially to development of data on the importance of Hispanics' language background and language proficiencies as they may affect college admissions opportunities and admissions decisions. I am certain you will agree that efforts to improve the participation of Hispanics in postsecondary education need to be based on, and I quote Dr. Durán, "...sound knowledge of the sociocultural, socioeconomic and linguistic factors which affect Hispanics' access to college and achievement in college."

Dr. Durán exerted a good deal of care in the development of the methodology and approach for the study. Drafts have been circulated to other Hispanic scholars for review and input. He has worked very carefully to ensure that the study be conducted in as sensitive a manner as possible.

I hope that you will carefully review Dr. Durán's study and agree with us that it merits support. Specifically, if you agree with us that the research is worthwhile, your cooperation in assisting Dr. Durán to secure high rates of student participation will be much appreciated. We have been assured that the final report of the project will be targeted for general dissemination by the College Board as part of its research report series.

The Coalition endorses the study as proposed and we are optimistic that the findings will be a valuable addition to our understanding of this area. Thank you for your kind attention.

Rafael J. Magallán

Rafael J. Magallán, Executive Director

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